

State of Alaska

Teachers' Retirement System

Actuarial Valuation Report
as of June 30, 2014

October 2015



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October 6, 2015

State of Alaska
The Alaska Retirement Management Board
The Department of Revenue, Treasury Division
The Department of Administration, Division of Retirement and Benefits
P.O. Box 110203
Juneau, AK 99811-0203

Certification of Actuarial Valuation

Dear Members of The Alaska Retirement Management Board, The Department of Revenue and The Department of Administration:

This report summarizes the annual actuarial valuation results of the State of Alaska Teachers' Retirement System (TRS) as of June 30, 2014 performed by Buck Consultants, LLC.

The actuarial valuation is based on financial information provided in the financial statements audited by KPMG LLP and member data provided by the Division of Retirement and Benefits and summarized in this report. The benefits considered are those delineated in Alaska statutes effective June 30, 2014. The actuary did not verify the data submitted, but did perform tests for consistency and reasonableness.

All costs, liabilities and other factors under the System were determined in accordance with generally accepted actuarial principles and procedures. An actuarial cost method is used to measure the actuarial liabilities which we believe is reasonable. Buck Consultants, LLC is solely responsible for the actuarial data and actuarial results presented in this report. This report fully and fairly discloses the actuarial position of the System.

The State of Alaska Teachers' Retirement System is funded by Employer, State, and Member Contributions in accordance with the funding policy adopted by the Alaska Retirement Management Board (Board) and as required by Alaska state statutes. The funding objective for the State of Alaska Teachers' Retirement System is to pay required contributions that remain level as a percent of total TRS Compensation. The Board has also established a funding policy objective that the required contributions be sufficient to pay the Normal Costs of active plan members, System expenses, and amortize the Unfunded Actuarial Accrued Liability as a level percentage of payroll over a closed 25-year period and as required by Alaska state statutes.

In accordance with Senate Bill 119, signed into law May 28, 2014, and HB 385, signed into law on June 23, 2014, the following changes are effective for this June 30, 2014 actuarial valuation:

- The amortization method used for funding changed from the level dollar amount to the level percentage of payroll method and the amortization period is re-initialized to a closed 25-year period from June 30, 2014.
- The additional state contribution for fiscal year ending June 30, 2015 is exactly \$2,000,000,000.
- The two-year rate setting time lag is intended to be eliminated. The two-year lag in the setting of contribution rates is replaced by a two-year roll forward of liabilities and projected normal costs and a one-year roll forward of June 30, 2015 assets.
- The Actuarial Value of Assets is reset to the Fair Value as of June 30, 2014. The five-year smoothing method with grow-in will be implemented over the next five years.
- The 20% corridor over/under the Fair Value of Assets is eliminated in the calculation of the Actuarial Value of Assets.

The compensation used to determine required contributions is the total compensation of all active members in TRS, including those hired after July 1, 2006 who are members of the Defined Contribution Retirement (DCR) Plan. This objective is currently being met and is projected to continue to be met.

In our opinion, the actuarial assumptions used are reasonable, taking into account the experience of the System and reasonable long-term expectations, and represent our best estimate of the anticipated long-term experience under the System. The actuary performs an analysis of System experience periodically and recommends changes if, in the opinion of the actuary, assumption changes are needed to more accurately reflect expected future experience. The last full experience analysis was performed in 2014. A review of the healthcare assumptions was performed for this actuarial valuation and changes were made to the healthcare cost trend rates and the per capita claim cost rates effective June 30, 2014 to better reflect expected future healthcare experience. A summary of the actuarial assumptions and methods used in this actuarial valuation are shown in Section 6.

The assumptions and methods used to determine the Actuarially Determined Contributions (ADC) of the Employers to the State of Alaska Teachers' Retirement System as outlined in this report and all supporting schedules meet the parameters and requirements for disclosure of Governmental Accounting Standards Board (GASB) Statements No. 67, Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans, and No. 43, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans. Based on member data and asset information provided by the Division of Retirement and Benefits, we have prepared the trend data schedule under GASB No. 43 that is included in the Financial Section of the CAFR. We have also prepared the member data tables shown in Section 5 of this report for the Statistical Section of the CAFR, and the summary of actuarial assumptions, solvency test, and analysis of financial experience for the Actuarial Section of the CAFR.

Both of the undersigned are Associates of the Society of Actuaries and Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained in this report. This report has been prepared in accordance with all Applicable Actuarial Standards of Practice. We are available to answer any questions on the material contained in the report, or to provide explanations or further details as may be appropriate.

Respectfully submitted,



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Todd D. Kanaster, ASA, MAAA, FCA
Senior Consultant

The undersigned actuary is responsible for all assumptions related to the average annual per capita health claims cost and the health care cost trend rates, and hereby affirms her qualification to render opinions in such matters, in accordance with the qualification standards of the American Academy of Actuaries.



Melissa A. Bissett, FSA, MAAA
Senior Consultant, Health & Productivity

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Executive Summary

Overview

The State of Alaska Teachers' Retirement System provides pension and postemployment healthcare benefits to teachers and other eligible participants. The Commissioner of the Department of Administration is responsible for administering the System. The Alaska Retirement Management Board has fiduciary responsibility over the assets of the System. This report presents the results of the actuarial valuation of the System benefits as of the valuation date of June 30, 2014.

Purpose

An actuarial valuation is performed on the retirement plan annually as of the beginning of the fiscal year. The main purposes of the actuarial valuation detailed in this report are:

1. To determine the Employer/State contribution necessary to meet the Board's funding policy for the System;
2. To disclose the funding assets and liability measures as of the valuation date;
3. To disclose the accounting measures for the System required by GASB Nos. 67 and 43 as of the end of the last fiscal year;
4. To review the current funded status of the System;
5. To compare actual and expected experience under the System during the last fiscal year;
6. And to report trends in contributions, assets, liabilities, and funded status over the last several years.

The actuarial valuation provides a "snapshot" of the funded position of the TRS based on the plan provisions, membership, assets, and actuarial assumptions as of the valuation date. Actuarial projections are also performed to provide a long-term view of the expected future funding status and contribution patterns (see Section 4).

Future actuarial valuation measurements and projections may differ from the current measurements presented in this report to such factors as: plan experience different from that anticipated by the economic and demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for these measurements, and changes in plan provisions or applicable law. The sensitivity analysis shown in Section 4.7 is an example of the differences which can occur in projected contribution amounts when actual investment returns are different than assumed, but does not include the impact of all possible future differences that can impact future measurements.

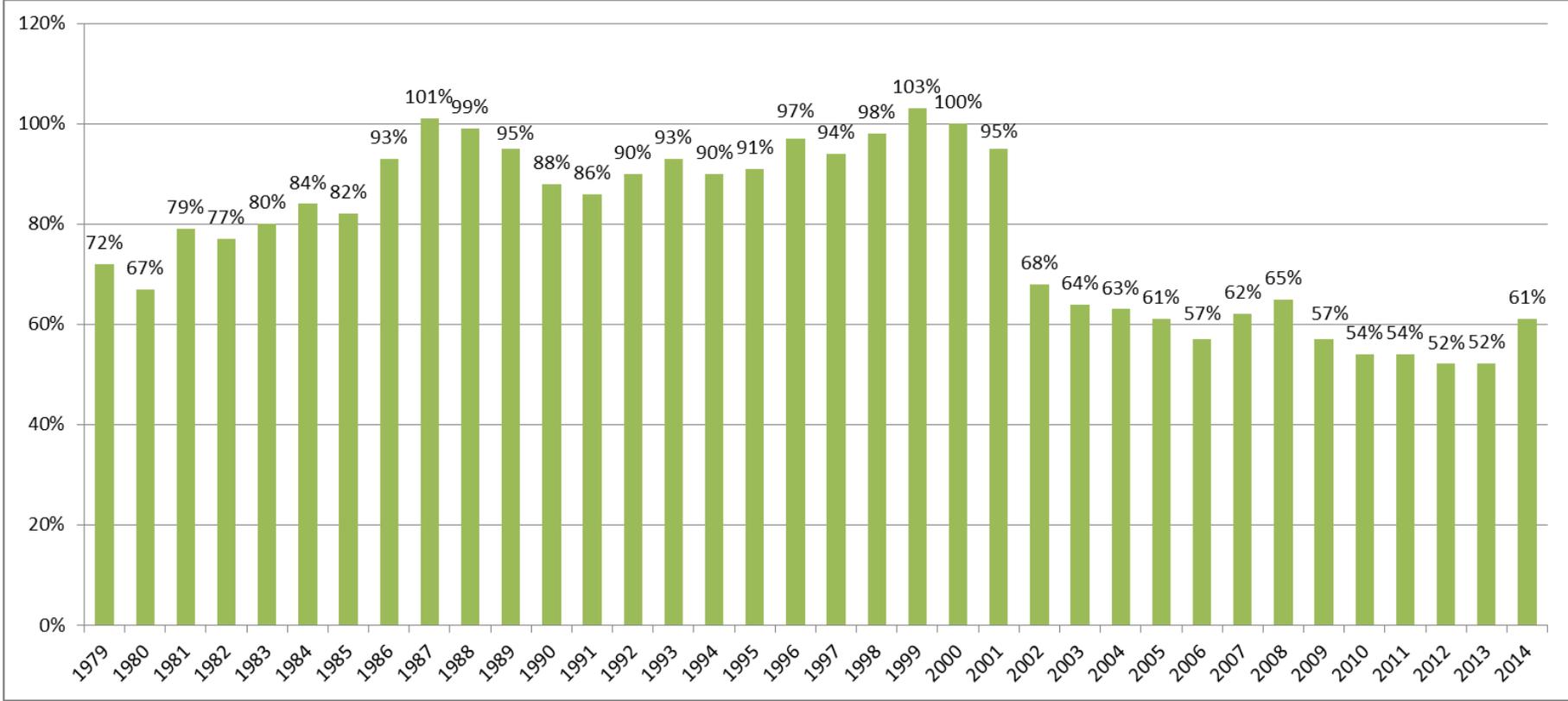
Funding Status

The funding status is a measure of the progress that has been made in funding the plan as of the valuation date. It is determined as a ratio of the actuarial value of assets divided by the total actuarial accrued liability on the valuation date. A ratio of over 100% represents a plan that is ahead in funding on the valuation date. A comparative summary of the funding ratio from the prior and current actuarial valuations follows:

Funding Status as of June 30 ¹		
	2013	2014
Pension		
a. Accrued Liability ¹	\$ 6,589,553	\$ 6,921,362
b. Valuation Assets	<u>3,170,313</u>	<u>3,771,139</u>
c. Unfunded Accrued Liability ¹ , (a) – (b)	\$ 3,419,240	\$ 3,150,223
d. Funding Ratio based on Valuation Assets, (b) ÷ (a)	48.1%	54.5%
e. Fair Value of Assets ¹	\$ 3,279,130	\$ 3,771,139
f. Funding Ratio based on Fair Value of Assets, (e) ÷ (a)	49.8%	54.5%
Healthcare		
a. Accrued Liability ¹	\$ 3,002,554	\$ 2,919,670
b. Valuation Assets ¹	<u>1,803,763</u>	<u>2,248,135</u>
c. Unfunded Accrued Liability ¹ , (a) – (b)	\$ 1,198,791	\$ 671,535
d. Funding Ratio based on Valuation Assets, (b) ÷ (a)	60.1%	77.0%
e. Fair Value of Assets ¹	\$ 1,866,421	\$ 2,248,135
f. Funding Ratio based on Fair Value of Assets, (e) ÷ (a)	62.2%	77.0%
Total		
a. Accrued Liability ¹	\$ 9,592,107	\$ 9,841,032
b. Valuation Assets ¹	<u>4,974,076</u>	<u>6,019,274</u>
c. Unfunded Accrued Liability ¹ , (a) – (b)	\$ 4,618,031	\$ 3,821,758
d. Funding Ratio based on Valuation Assets, (b) ÷ (a)	51.9%	61.2%
e. Fair Value of Assets ¹	\$ 5,145,551	\$ 6,019,274
f. Funding Ratio based on Fair Value of Assets, (e) ÷ (a)	53.6%	61.2%

¹ In thousands.

TRS Funding Ratio History (Based on Valuation Assets)



As shown previously, the funding ratio based on valuation assets as of June 30, 2014 has increased from 51.9% to 61.2%, an increase of 9.3%. The total calculated Employer/State contribution rate has decreased from 69.24% of total payroll as of June 30, 2013 to 38.89% as of June 30, 2014, a decrease of 30.35% of total payroll. The reasons for the change in the funded status and calculated contribution rate are explained below.

1. Retiree Medical Costs and Assumptions

The following table summarizes the monthly premium per benefit recipient since 1977.

Time Period	Monthly Premium Per Retiree For Health Coverage	Annual Percentage Change	Average Compound Annual Increase Since FY78
2/1/77-1/31/78	\$ 57.64	66%	- -
2/1/78-1/31/79	69.10	20%	20%
2/1/79-1/31/80	64.70	-6%	6%
2/1/80-1/31/81	96.34	49%	19%
2/1/81-1/31/82	96.34	0%	14%
2/1/82-1/31/83	115.61	20%	15%
2/1/83-1/31/84	156.07	35%	18%
2/1/84-1/31/85	191.85	23%	19%
2/1/85-1/31/86	168.25	-12%	14%
2/1/86-1/31/87	165.00	-2%	12%
2/1/87-1/31/88	140.25	-15%	9%
2/1/88-1/31/89	211.22	51%	13%
2/1/89-1/31/90	252.83	20%	13%
2/1/90-1/31/91	243.98	-4%	12%
2/1/91-1/31/92	243.98	0%	11%
2/1/92-1/31/93	226.90	-7%	10%
2/1/93-1/31/94	309.72	37%	11%
2/1/94-1/31/95	336.05	9%	11%
2/1/95-1/31/96	350.50	4%	11%
2/1/96-1/31/97	350.50	0%	10%
2/1/97-1/31/98	368.00	5%	10%
2/1/98-12/31/98	368.00	0%	9%
1/1/99-12/31/99	442.00	20%	10%
1/1/00-12/31/00	530.00	20%	10%
1/1/01-12/31/01	610.00	15%	10%
1/1/02-12/31/02	668.00	10%	10%
1/1/03-12/31/03	720.00	8%	10%
1/1/04-12/31/04	806.00	12%	10%
1/1/05-12/31/05	850.00	5%	10%
1/1/06-12/31/06	876.00	3%	10%
1/1/07-12/31/07	876.00	0%	10%
1/1/08-12/31/08	876.00	0%	9%
1/1/09-12/31/09	937.00	7%	9%
1/1/10-12/31/10	1,068.00	14%	9%
1/1/11-12/31/11	1,176.00	10%	9%
1/1/12-12/31/12	1,200.00	2%	9%
1/1/13-12/31/13	1,223.00	2%	9%
1/1/14-12/31/14	1,223.00	0%	9%
1/1/15-12/31/15	1,223.00	0%	8%

As shown in above table, the monthly retiree medical premium for the January 1, 2015 to December 31, 2015 time period will remain at \$1,223. This represents an increase of 0% from the previous year's medical premium. The health cost trend rates used for this valuation are described in

Section 6.3. Over the last 10 years, annual premium rate changes have ranged from no change to up 14%. Also, over the last ten years, the increase in the premium rate has been about 4.3% compounded annually.

An analysis of medical costs was completed based on claims information and enrollment data provided by HealthSmart (formerly Wells Fargo Insurance Services and Aetna). Costs for medical services and prescriptions were analyzed separately, and separate trend rates were developed to project expected future medical and prescription costs. An offset for costs expected to be reimbursed by Medicare was incorporated beginning at age 65. Average medical claims were then distributed across the population based on expected increases in medical expenses that occur with age.

For the 2014 valuation, we updated incurred claims cost and Medicare offset analyses using fiscal year-to-date 2014 claims and enrollment information through June 2014. For Medicare Part B only participants, we were provided a census, from Aetna, of all current retirees that do not have Medicare Part A. A lower average claims cost was applied to retirees covered by both Medicare Part A and B vs. retirees covered only by Medicare Part B. 2014 experience rates were developed using historical incurred claims for fiscal years 2011-2014. The trend assumption is based on the proposed Society of Actuaries' Healthcare Cost Trend Model updated for 2014. The trend rate varies by year declining to 4.5% over 100 years pre-Medicare and 4% for Medicare. The trends vary by medical, pre-Medicare and Medicare, and aggregate prescription drugs.

This data was reviewed and compared to management level reporting supplied by HealthSmart and Aetna. For the 2014 valuation, we have not modified any management level reporting information used to develop per capita claim cost rates. However, we will continue to compare data from both sources and potentially modify future claims cost rate derivation to reflect salient information at the individual claimant level that may enhance global management level data. For the 2014 valuation, we do not recommend any changes to morbidity assumptions used to project increasing claims costs as members age. However, we will continue to compare age-based claims costs derived from individual claimant data to the current morbidity curve and potentially modify the assumed aging impact on claims costs in future valuations. Finally, explicit third-party administration (TPA) and applicable healthcare legislation costs were added to medical and prescription claims cost rates. Per-member TPA costs are derived from the current Aetna contract and are projected to increase at the assumed rate of 5%.

Based upon variations in medical cost trends between Medicare-eligible and pre-Medicare populations, Buck's practice is to use separate healthcare cost trends for these populations. This, in conjunction with updates to legislation, long-term trend models and time since prior assumptions were set, indicated a need to re-set this assumption for the 2014 valuation.

Since 2004, the funding valuation also reflects the impact of the Medicare Part D Retiree Drug Subsidy (RDS) in the projection of prescription drug benefit costs. Buck's actuaries have attested that the prescription drug benefits meet the actuarial equivalence requirements and the plan qualifies to receive the RDS under the Medicare Prescription Drug, Improvement and Modernization Act of 2003 (MMA) for calendar 2014 and 2015. Based on current plan provisions and utilization data, we anticipate the plan will continue to qualify for RDS payments. The State has shared its payments for calendar 2006 through September 2014 and this information was used to estimate future RDS payments in this valuation. Please note, Part D subsidies are not reflected for accounting purposes under GASB No. 43.

Utilization and claims cost data indicate that healthcare experience emerging since the prior valuation is increasing slightly in the aggregate, but still favorably, compared to industry and aggregate trend expectations. Non-Medicare claims are trending higher recently and this was considered in updating the trend assumptions. A large portion of ongoing unfavorable experience is due to members with chronic diseases (diabetes, ESRD, etc.), and the corresponding large claims that accompany those

diseases. Due to the nature of these diseases, it is expected that the State will have these members as benefit recipients for some time, and that costs may be able to be controlled, but not eliminated. With the introduction of a health improvement plan for State employees, as well as disease management provided by the TPA, it is hoped that the incidence of the most severe and costly chronic conditions can be reduced to a more manageable and stable level. As with the prior valuation, a weighting methodology is employed, where each of the experience years is weighted appropriately, with more emphasis on the most recent two years, when calculating the claims costs. This has the effect of preventing any one year from unduly influencing the claims costs. In the current valuation, we averaged national trend assumptions with Alaska-specific trend, with 75% weight to Alaska-specific trend and 25% to national trend, during the experience period to give more credibility to Alaska-specific experience while still reflecting national trends.

The following table summarizes data sources and assumptions and the relative impact changes in each have on healthcare cost projections for 2014 as compared to 2013:

Healthcare Cost Rate Data Source or Assumption Change, 2014 vs. 2013	Gain / Loss Impact on 2014 Valuation Results
Claim lag specific to medical and prescription experience	Negligible
Individual claims level data	<ul style="list-style-type: none"> – No impact on cost data used for 2014, though potentially a source of future modifications – No impact on morbidity assumptions used for 2014, though potentially a source of future modifications
Explicit TPA fees	Negligible
Experience Study	Moderate loss due to updated demographic assumptions
Actual RDS payments received	Negligible
Updated healthcare cost trend assumptions	Gain due to lower ultimate trend rates; particularly for the Medicare population
Aggregate claims data	Moderate gain due to experience mainly Medicare eligible, but dampened by weighting methodology
Census Data – Medicare Part B only participation	Loss due to updated census

2. Investment Experience

The actuarial asset value was reinitialized to equal Fair Value of Assets as of June 30, 2014. Beginning in 2015, the asset value method will recognize 20% of the gain or loss each year, for a period of five years. The approximate FY14 investment return based on fair values was 18.2% compared to the expected investment return of 8.00%. This resulted in a gain of approximately \$540.2 million to the System from investment experience. Due to the immediate recognition of deferred gains, the approximate FY14 investment return based on actuarial values was 22.7%, compared to the expected investment return of 8.00%.

3. Salary Increase

During the period from June 30, 2013 to June 30, 2014, salary increases for continuing active members were less than anticipated in the valuation assumptions. Salary gains of \$30.3 million lowered accrued liabilities, which increased the funding ratio by 0.30%. The net effect of the salary gain was a decrease of 0.43% in the Employer/State contribution rate.

4. Demographic Experience

Section 5 provides statistics on active and inactive participants. The number of active participants decreased 7.73% from 6,352 at June 30, 2013 to 5,861 at June 30, 2014 due to the closure of the plan to new entrants as of July 1, 2006. The average age of active participants increased from 49.45 to 49.79 and average credited service increased from 15.80 to 16.43 years.

The number of retirees and beneficiaries increased 0.38% from 11,705 to 11,750, and their average age increased from 68.38 to 69.09. There was a 40.62% increase in the number of vested terminated participants from 906 to 1,274. Their average age increased from 49.68 to 52.56.

The overall effect of these participant data changes along with the healthcare experience was an actuarial gain to the System, resulting in a decrease in the Employer/State contribution rate of 6.84% of total payroll. This gain is due to having a larger payroll base to spread the unfunded contribution over, and a smaller than expected growth in the per capita claims cost rates for healthcare. The gain/loss by decrement on the accrued liability is shown on the summary page.

5. Effect of the Two-Year Delay in the Contribution Rate

As of June 30, 2013, the actuarially calculated rate was 69.24% for FY16 Employer/State contributions. Since Employer/State contribution rates are determined two years prior to the fiscal year, the June 30, 2011 adopted employer rate of 50.10% was contributed during FY14. The difference between the two calculated rates, 50.10% and 69.24%, or an actuarial contribution rate of 19.14% less than the actuarial rate, created a contribution deficit to the System. This deficit increased the Employer/State contribution rate by 1.24%.

6. Actuarial Projections

At the Fall 1991 Board Meetings, the TRS Board approved the use of an enhanced actuarial projection system in the valuation report. The same actuarial cost method is used, but the enhanced system projects the associated liabilities 30 years into the future. By also projecting plan assets, this report in effect produces an actuarial valuation for each of the next 30 years. Section 4, Actuarial Funding Projections, contains the results of this analysis.

This type of information can be especially useful to multi-tiered systems, such as TRS. No new DB plan entrants are anticipated. The total active population is expected to grow at 0.5% per year (decreased from 1% last year) and all future demographic assumptions are expected to be exactly realized.

7. Changes in Methods from the Prior Valuation

In accordance with Senate Bill 119, signed into law May 28, 2014, and HB 385, signed into law on June 23, 2014, the following changes are effective for this June 30, 2014 actuarial valuation:

- The amortization method used for funding changed from the level dollar amount to the level percentage of payroll method and the amortization period is re-initialized to a closed 25-year period from June 30, 2014.
- The additional state contribution for fiscal year ending June 30, 2015 is exactly \$2,000,000,000.
- The two-year rate setting time lag is intended to be eliminated. The two-year lag in the setting of contribution rates is replaced by a two-year roll forward of liabilities and projected normal costs and a one-year roll forward of June 30, 2015 assets.
- The Actuarial Value of Assets is reset to the Fair Value as of June 30, 2014. The five-year smoothing method with grow-in will be implemented over the next five years.
- The 20% corridor over/under the Fair Value of Assets is eliminated in the calculation of the Actuarial Value of Assets.

8. Changes in Assumptions from the Prior Valuation

Effective for the June 30, 2014 valuation, the board adopted the changes to the demographic and economic assumptions recommended by the actuary based on the results of an experience analysis performed on the population experience from July 1, 2009 through June 30, 2013. The changes in assumptions were adopted by the Board during the December 2014 Board meeting. We also updated the Healthcare Cost Trend and Contribution Trend assumptions.

9. Changes in Benefit Provisions Since the Prior Valuation

There have been no changes in benefit provisions since the prior valuation.

Comparative Summary of Key Actuarial Valuation Results

Employer/State Contribution Rates for Pension for Fiscal Year:	2016	2017
a. Normal Cost Rate Net of Member Contributions	2.50%	2.44%
b. Past Service Rate	<u>45.56%</u>	<u>15.34%</u>
c. Total Employer/State Contribution Rate (a) + (b)*	48.06%	17.78%
Employer/State Contribution Rates for Postemployment Healthcare for Fiscal Year:	2016	2017
a. Normal Cost Rate	3.20%	2.19%
b. Past Service Rate	<u>17.98%</u>	<u>3.43%</u>
c. Total Employer/State Contribution Rate (a) + (b)*	21.18%	5.62%
Total Employer/State Contribution Rates for Fiscal Year:	2016	2017
a. Normal Cost Rate Net of Member Contributions	5.70%	4.63%
b. Past Service Rate	<u>63.54%</u>	<u>18.77%</u>
c. Total Employer/State Contribution Rate (a) + (b)*	69.24%	23.40%
d. Board Adopted Total Employer/State Contribution Rate**	24.48%	23.40%
e. Defined Contribution Retirement (DCR) Rate Paid by Employers	<u>4.79%</u>	<u>4.62%</u>
f. Board Adopted Total Rate, Including DCR Rate Paid by Employers (d) + (e)	29.27%	28.02%

* The contribution rates for fiscal year ending June 30, 2017 are to be determined using new methodology in accordance with 2014 legislation under HB 385 and SB 119 which change the amortization methodology to a closed 25-year period as a level percentage of pay and eliminate the time lag on the contribution rate calculation using a "roll-forward" approach and assuming 0% population growth. Liabilities are rolled forward two years and assets as of June 30, 2015 are rolled forward one year with gains and losses smoothed over five years.

** Contribution rates for FY16 were recalculated after the 2013 actuarial valuation was performed in accordance with the new methodology required under HB 385 and SB 119, and adopted by the Board.

Contribution rates are based on salary for both DB plan members and DCR members, combined. The rates shown above are for funding purposes which differ from the Annual Required Contribution for GASB No. 43 reporting purposes. Under GASB No. 43, postemployment healthcare liabilities are gross of the retiree drug subsidy and are calculated with a discount rate for a partially funded plan. Under both GASB Nos. 67 and 43, the amortization of the unfunded liabilities is calculated as a level dollar amount.

Contribution rates include Employer contribution rates as limited by State statute, and include the additional State contribution required under SB 125.

Summary of Actuarial Gain/(Loss) and Other Changes During the Year

The following table summarizes the sources of change in the total Employer/State contribution rate determined as of June 30, 2014 based on DB and DCR member payroll combined:

	Pension	Healthcare	Total
1. Last year's total Employer/State contribution rate	48.06%	21.18%	69.24%
2. Change due to:			
a. Effect of two-year delay in the contribution rate	1.10%	0.14%	1.24%
b. Investment experience	(3.97)%	(2.34)%	(6.31)%
c. Salary increases	(0.43)%	N/A	(0.43)%
d. Demographic and medical experience ¹	1.75%	(8.59)%	(6.84)%
e. Change in methodology and assumptions	<u>(28.73)%</u>	<u>(4.77)%</u>	<u>(33.50)%</u>
f. Total change (a + b + c + d + e)	(30.28)%	(15.56)%	(45.84)%
3. Total Employer/State contribution rate this year (1) + (2f)	17.78%	5.62%	23.40%

The following table shows the gain/(loss) on total accrued liability (in thousands):

	Pension	Healthcare	Total	% of Total Expected Accrued Liability
Retirement Experience	\$ 4,456	\$ 3,389	\$ 7,845	0.1%
Termination Experience	(17,047)	(8,171)	(25,218)	(0.3%)
Active Mortality Experience	(488)	(221)	(709)	nil
Inactive Mortality Experience	(5,439)	(150)	(5,589)	(0.1%)
Disability Experience	(347)	(290)	(637)	nil
Rehires	(11,674)	(2,333)	(14,007)	(0.1%)
Other Demographic Experience ²	10,945	16,232	27,177	0.3%
Salary Increases	30,302	N/A	30,302	0.3%
Alaska COLA	(491)	N/A	(491)	nil
PRPA Other Than Expected	(3,190)	N/A	(3,190)	nil
Medical Claims Costs	N/A	128,195	128,195	1.3%
Total	\$ 7,027	\$ 136,651	\$ 143,678	1.4%

A gain on total accrued liability is favorable to the System. A loss is unfavorable.

¹ Includes changes in future healthcare claims costs.

² Reflects data and programming changes

Section 1 Actuarial Funding Results

Section 1.1 Actuarial Liabilities and Normal Cost (\$'s in 000's)

As of June 30, 2014	Present Value of Projected Benefits	Accrued (Past Service) Liability
Active Members		
Retirement Benefits	\$ 2,265,675	\$ 1,941,300
Termination Benefits	61,559	27,148
Disability Benefits	5,861	(925)
Death Benefits	12,500	9,783
Return of Contributions	6,000	(60,487)
Medical and Prescription Drug Benefits	1,080,069	956,866
Medicare Part D Subsidy	(50,948)	(45,419)
Indebtedness	(37,707)	(37,707)
Subtotal	\$ 3,343,009	\$ 2,790,559
Inactive Members		
Not Vested	\$ 42,955	\$ 42,955
Vested Terminations		
- Retirement Benefits	319,819	319,819
- Medical and Prescription Drug Benefits	262,876	262,876
- Medicare Part D Subsidy	(12,428)	(12,428)
- Indebtedness	(12,212)	(12,212)
Retirees & Beneficiaries		
- Retirement Benefits	4,691,688	4,691,688
- Medical and Prescription Drug Benefits	1,894,371	1,894,371
- Medicare Part D Subsidy	(136,596)	(136,596)
Subtotal	\$ 7,050,473	\$ 7,050,473
Total	\$ 10,393,482	\$ 9,841,032
Total Pension	\$ 7,356,138	\$ 6,921,362
Total Medical, Net of Part D Subsidy	\$ 3,037,344	\$ 2,919,670
Total Medical, Gross of Part D Subsidy	\$ 3,237,316	\$ 3,114,113

As of June 30, 2014	Present Value of Projected Benefits	Accrued (Past Service) Liability
By Tier		
Tier 1		
- Pension	\$ 5,048,197	\$ 5,001,048
- Medical, Net of Part D Subsidy	1,867,593	1,856,155
Tier 2		
- Pension	2,307,941	1,920,314
- Medical, Net of Part D Subsidy	<u>1,169,751</u>	<u>1,063,515</u>
Total	\$ 10,393,482	\$ 9,841,032

As of June 30, 2014	Normal Cost
Active Members	
Retirement Benefits	\$ 47,576
Termination Benefits	4,806
Disability Benefits	958
Death Benefits	411
Return of Contributions	9,857
Medical and Prescription Drug Benefits	20,817
Medicare Part D Subsidy	<u>(971)</u>
Subtotal	\$ 83,454
Total	\$ 83,454
Total Pension	\$ 63,608
Total Medical, Net of Part D Subsidy	\$ 19,846
Total Medical, Gross of Part D Subsidy	\$ 20,817
By Tier	
Tier 1	
- Pension	\$ 10,874
- Medical, Net of Part D Subsidy	2,877
Tier 2	
- Pension	52,734
- Medical, Net of Part D Subsidy	<u>16,969</u>
Total	\$ 83,454

Section 1.2 Actuarial Contributions as of June 30, 2014

(\$'s in 000's)

Normal Cost Rate	Pension	Healthcare	Total
1. Total Normal Cost	\$ 63,608	\$ 19,846	\$ 83,454
2. DB Member Salaries Projected for FY15	490,667	490,667	490,667
3. DCR Member Salaries Projected for FY15	232,051	232,051	232,051
4. Total Salaries Projected for FY15	722,718	722,718	722,718
5. Normal Cost Rate			
a. Based on DB Member Salaries, (1) ÷ (2)	12.96%	4.04%	17.00%
b. Based on Total Salaries, (1) ÷ (4)	8.80%	2.75%	11.55%
6. Average Member Contribution Rate ¹	5.92%	0%	5.92%
7. Employer Normal Cost Rate, (5b) – (6)	2.88%	2.75%	5.63%
Past Service Rate			
1. Accrued Liability	\$ 6,921,362	\$ 2,919,670	\$ 9,841,032
2. Valuation Assets	<u>3,771,139</u>	<u>2,248,135</u>	<u>6,019,274</u>
3. Total Unfunded Liability, (1) – (2)	\$ 3,150,223	\$ 671,535	\$ 3,821,758
4. Funded Ratio, (2) ÷ (1)	54.5%	77.0%	61.2%
5. Past Service Cost Amortization Payment ²	198,143	42,238	240,381
6. Total Salaries Projected for FY15	722,718	722,718	722,718
7. Past Service Rate, (5) ÷ (6)	27.42%	5.84%	33.26%
Total Employer/State Contribution Rate	30.30%	8.59%	38.89%
Normal Cost Rate by Tier (Total Employer and Member) ³			
Tier 1	13.50%	3.57%	17.07%
Tier 2	12.86%	4.14%	17.00%
Maturity Ratio	72.9%	68.8%	71.6%

¹ Assumes no member contribution from members in the DCR plan, 9.65% contributions for Tier 1 members who elected supplemental coverage and 8.65% for the remaining members.

² Amortized on a level percent of pay basis over a 25-year period.

³ Rate determined considering the pay for members of the plan in this tier. DCR payroll is excluded from these calculations.

Section 1.3 Roll Forward Contribution Rate Calculation

	Pension	Healthcare	Total
1. Liability Roll Forward			
a. Total Accrued Liability as of June 30, 2014	\$ 6,921,362	\$ 2,919,670	\$ 9,841,032
b. Normal Cost	63,608	19,846	83,454
c. Interest on (a) and (b) at 8%	558,798	235,161	793,959
d. Actual Benefit Payments	(420,956)	(118,851)	(539,807)
e. Interest on (d) at 8%, paid monthly	<u>(17,919)</u>	<u>(5,059)</u>	<u>(22,978)</u>
f. Expected Total Accrued Liability as of June 30, 2015	\$ 7,104,893	\$ 3,050,767	\$ 10,155,660
g. Projected Normal Cost	60,050	18,119	78,169
h. Interest on (f) and (g) at 8%	573,195	245,511	818,706
i. Estimated Benefit Payments	(452,928)	(158,776)	(611,704)
j. Interest on (i) at 8%, paid monthly	<u>(19,280)</u>	<u>(6,759)</u>	<u>(26,039)</u>
k. Expected Total Accrued Liability as of June 30, 2016	\$ 7,265,930	\$ 3,148,862	\$ 10,414,792
2. Asset Roll Forward			
a. Actuarial Value of Assets as of June 30, 2014	\$ 3,771,139	\$ 2,248,135	\$ 6,019,274
b. Interest on (a) at 3.3%	124,448	74,188	198,636
c. Actual Employee Contributions	43,289	227	43,516
d. Actual Employer Contributions	34,337	25,531	59,868
e. State Assistance	1,662,700	337,300	2,000,000
f. Medicare Part D Subsidy	0	0	0
g. Interest on (c) – (f) at 3.3%*	35,421	7,349	42,770
h. Actual Benefit Payments	(420,956)	(118,851)	(539,807)
i. (Gain)/Loss deferred	173,030	89,568	262,598
j. Interest on (h) at 3.3%, paid monthly	<u>(7,469)</u>	<u>(2,109)</u>	<u>(9,578)</u>
k. Expected Actuarial Value of Assets as of June 30, 2015	\$ 5,415,939	\$ 2,661,338	\$ 8,077,277
l. Interest on (j) at 8%	433,275	212,907	646,182
m. Employee Contributions	46,220	0	46,220
n. Employer Contributions	31,520	26,516	58,036
o. State Assistance	90,590	39,519	130,109
p. Medicare Part D Subsidy	0	0	0
q. Interest on (l) – (o) at 8%*	10,297	4,202	14,499
r. Estimated Benefit Payments	(452,928)	(158,776)	(611,704)
s. Recognition of Gain/(Loss) from prior year	43,257	22,392	65,649
t. Interest on (q) at 8%, paid monthly	<u>(19,280)</u>	<u>(6,759)</u>	<u>(26,039)</u>
u. Expected Actuarial Value of Assets as of June 30, 2016	5,512,376	2,756,555	8,268,931

	Pension	Healthcare	Total
3. Unfunded Liability Roll Forward			
a. Unfunded Liability as of June 30, 2014	\$ 3,150,223	\$ 671,535	\$ 3,821,758
b. Normal Cost	63,608	19,846	83,454
c. Interest on (a) and (b)	434,350	160,973	595,323
d. Actual Employee Contributions	(43,289)	(227)	(43,516)
e. Actual Employer Contributions	(34,337)	(25,531)	(59,868)
f. State Assistance	(1,662,700)	(337,300)	(2,000,000)
g. Gain/(Loss) deferred	(173,030)	(89,568)	(262,598)
h. Interest on (d) – (g)*	<u>(45,871)</u>	<u>(10,299)</u>	<u>(56,170)</u>
i. Expected Unfunded Liability as of June 30, 2015	\$ 1,688,954	\$ 389,429	\$ 2,078,383
j. Projected Normal Cost	60,050	18,119	78,169
k. Interest on (i) and (j) at 8%	139,920	32,603	172,523
l. Employee Contributions	(46,220)	0	(46,220)
m. Employer Contributions	(31,520)	(26,516)	(58,036)
n. State Assistance	(90,590)	(39,519)	(130,109)
o. Recognition of Gain/(Loss) from prior year	43,257	22,392	65,649
p. Interest on (l) – (o) at 8%*	<u>(10,297)</u>	<u>(4,202)</u>	<u>(14,499)</u>
q. Expected Unfunded Liability as of June 30, 2016	\$ 1,753,554	\$ 392,306	\$ 2,145,860
4. Expected Annual Salary for FY17			
a. Defined Benefit Members			\$ 439,854
b. Defined Contribution Retirement Members			<u>314,991</u>
c. Total Salary			\$ 754,845
5. Expected FY17 Contribution Rate Calculation			
a. Projected Normal Cost for FY17	\$ 56,551	\$ 16,513	\$ 73,064
b. Projected Normal Cost Rate for FY17	7.49%	2.19%	9.68%
c. Expected Member Contribution Rate for FY17	(5.05%)	0.00%	(5.05%)
d. Expected Employer Normal Cost Rate for FY17	2.44%	2.19%	4.63%
e. Expected Unfunded Liability as of June 30, 2016	\$ 1,753,554	\$ 392,306	\$ 2,145,860
f. 23 Year Amortization of Expected Unfunded Liability	115,803	25,907	141,710
g. Expected Past Service Cost Contribution Rate for FY17	15.34%	3.43%	18.77%
h. Expected Total Contribution Rate for FY17	\$ 17.78%	\$ 5.62%	\$ 23.40%

* Employee and Employer Contributions are paid throughout the year. State Assistance is paid in three equal installments on July 15th, November 15th, and March 15th of each year and at the beginning of the year thereafter.

Section 1.4 Actuarial Gain / (Loss) for FY14 (\$'s in 000's)

	Pension	Healthcare	Total
1. Expected Actuarial Accrued Liability			
a. Accrued Liability, June 30, 2013	\$ 6,589,553	\$ 3,002,554	\$ 9,592,107
b. Normal Cost for FY14	64,326	23,568	87,894
c. Interest on (a) and (b) at 8.00%	532,310	242,090	774,400
d. Benefit Payments for FY14	396,614	116,781	513,395
e. Refund of Contributions for FY14	2,387	0	2,387
f. Interest on (d) and (e) at 8.00% for one-half year	15,653	4,581	20,234
g. Change in Actuarial Assumptions	156,854	93,430	250,284
h. Change in Healthcare Cost Trend Rates	<u>N/A</u>	<u>(183,959)</u>	<u>(183,959)</u>
i. Expected Accrued Liability as of June 30, 2014 (a) + (b) + (c) – (d) – (e) – (f) + (g) + (h)	\$ 6,928,389	\$ 3,056,321	\$ 9,984,710
2. Actual Accrued Liability, June 30, 2014	<u>6,921,362</u>	<u>2,919,670</u>	<u>9,841,032</u>
3. Liability Gain/(Loss), (1)(i) – (2)	\$ 7,027	\$ 136,651	\$ 143,678
4. Expected Actuarial Asset Value			
a. Actuarial Asset Value, June 30, 2013	\$ 3,170,313	\$ 1,803,763	\$ 4,974,076
b. Interest on (a) at 8.00%	253,625	144,301	397,926
c. Employee Contributions for FY14	47,724	263	47,987
d. Employer Contributions for FY14	37,571	31,980	69,551
e. Employer Legislative Relief for FY14	208,890	107,956	316,846
f. Medicare Part D Subsidy	0	6,217	6,217
g. Interest on (c), (d), (e) and (f) at 8.00% for one half-year	11,541	5,744	17,285
h. Benefit Payments for FY14	396,614	116,781	513,395
i. Refund of Contributions for FY14	2,387	0	2,387
j. Interest on (h) and (i) at 8.00% for one half-year	<u>15,653</u>	<u>4,581</u>	<u>20,234</u>
k. Expected Actuarial Asset Value, June 30, 2014 (a) + (b) + (c) + (d) + (e) + (f) + (g) – (h) – (i) – (j)	\$ 3,315,010	\$ 1,978,862	\$ 5,293,872
5. Actuarial Asset Value, June 30, 2014	<u>3,771,139</u>	<u>2,248,135</u>	<u>6,019,274</u>
6. Actuarial Asset Gain/(Loss), (5) - (4)(k)	\$ 456,129	\$ 269,273	\$ 725,402
7. Actuarial Gain/(Loss), (3) + (6)	\$ 463,156	\$ 405,924	\$ 869,080
8. Effect of the 2-Year Delay on Contributions	\$ (126,593)	\$ (16,510)	\$ (143,103)
9. FY14 Gain/(Loss), (7) + (8)	\$ 336,563	\$ 389,414	\$ 725,977

Section 1.5 Development of Change in Unfunded Liability During FY14

	Pension	Healthcare	Total
1. 2013 Unfunded Liability	\$ 3,419,240	\$ 1,198,791	\$ 4,618,031
a. Interest on unfunded liability	\$ 273,539	\$ 95,904	\$ 369,443
b. Normal cost	64,326	23,568	87,894
c. Employee contributions	(47,724)	(263)	(47,987)
d. Employer contributions	(37,571)	(31,980)	(69,551)
e. Employer Legislative Relief	(208,890)	(107,956)	(316,846)
f. Medicare Part D subsidy	0	(6,217)	(6,217)
g. Interest on b., c., d., e., and f.	(6,395)	(3,859)	(10,254)
h. Change in Actuarial Assumptions	156,854	93,430	250,284
i. Change in Healthcare Cost Trend Rates	<u>N/A</u>	<u>(183,959)</u>	<u>(183,959)</u>
j. Expected change in unfunded liability during FY14	\$ 194,139	\$ (121,332)	\$ 72,807
2. Expected 2014 Unfunded Liability	\$ 3,613,379	\$ 1,077,459	\$ 4,690,838
a. Liability (gains)/losses	\$ (7,027)	\$ (136,651)	\$ (143,678)
b. Assets (gains)/losses	<u>(456,129)</u>	<u>(269,273)</u>	<u>(725,402)</u>
c. Other changes in unfunded liability during FY14	\$ (463,156)	\$ (405,924)	\$ (869,080)
3. Actual 2014 Unfunded Liability	\$ 3,150,223	\$ 671,535	\$ 3,821,758

Section 1.6 Analysis of Financial Experience

Pension
Change in Employer/State Contribution Rate
Due to (Gains) and Losses in Accrued Liabilities During the Last Five Fiscal Years
Resulting from Differences between Assumed Experience and Actual Experience

Type of (Gain) or Loss	Change in Employer/State Contribution Rate During Fiscal Year				
	2010	2011	2012	2013	2014
1. Health Experience	N/A	N/A	N/A	N/A	N/A
2. Salary Experience	0.59%	(0.03)%	0.00%	(0.30)%	(0.43)%
3. Investment Experience	(0.34)%	0.18%	3.47%	2.09%	(3.97)%
4. Demographic Experience	(0.75)%	(0.03)%	(0.36)%	0.38%	1.75%
5. Contribution Shortfall	<u>0.46%</u>	<u>0.75%</u>	<u>0.52%</u>	<u>1.34%</u>	<u>1.10%</u>
6. (Gain) or Loss During Year From Experience, (1) + (2) + (3) + (4) + (5)	(0.04)%	0.87%	3.63%	3.51%	(1.55)%
7. Assumption and Method Changes	3.96%	0.00%	9.52%	0.00%	(28.73)%
8. System Benefit Changes	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>
9. Composite (Gain) or Loss During Year, (6) + (7) + (8)	3.92%	0.87%	13.15%	3.51%	(30.28)%
10. Beginning Total Employer/State Contribution Rate	<u>26.61%</u>	<u>30.53%</u>	<u>31.40%</u>	<u>44.55%</u>	<u>48.06%</u>
11. Ending Valuation Year Total Employer/State Contribution Rate, (9) + (10)	30.53%	31.40%	44.55%	48.06%	17.78%
12. Fiscal Year Rates					
a. Fiscal Year Employer/State Contribution Rates	30.53%	31.40%	29.90%	15.85%	17.78%*
b. Fiscal Year for Which Rate Applies	FY13	FY14	FY15	FY16	FY17

*Expected. Actual Rate to be determined.

Healthcare
Change in Employer/State Contribution Rate
Due to (Gains) and Losses in Accrued Liabilities During the Last Five Fiscal Years
Resulting from Differences between Assumed Experience and Actual Experience

Type of (Gain) or Loss	Change in Employer/State Contribution Rate During Fiscal Year				
	2010	2011	2012	2013	2014
1. Health Experience	0.19%	(0.72)%	(2.02)%	(1.21)%	(8.59)%
2. Salary Experience	N/A	N/A	N/A	N/A	N/A
3. Investment Experience	0.39%	0.28%	0.71%	0.35%	(2.34)%
4. Demographic Experience	N/A	N/A	N/A	N/A	N/A
5. Contribution Shortfall	<u>(0.45)%</u>	<u>0.11%</u>	<u>0.19%</u>	<u>0.28%</u>	<u>0.14%</u>
6. (Gain) or Loss During Year From Experience, (1) + (2) + (3) + (4) + (5)	0.13%	(0.33)%	(1.12)%	(0.58)%	(10.79)%
7. Assumption and Method Changes	2.90%	0.00%	4.18%	0.00%	(4.77)%
8. System Benefit Changes	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>
9. Composite (Gain) or Loss During Year, (6) + (7) + (8)	3.03%	(0.33)%	3.06%	(0.58)%	(15.56)%
10. Beginning Total Employer/State Contribution Rate	<u>16.00%</u>	<u>19.03%</u>	<u>18.70%</u>	<u>21.76%</u>	<u>21.18%</u>
11. Ending Valuation Year Total Employer/State Contribution Rate, (9) + (10)	19.03%	18.70%	21.76%	21.18%	5.62%
12. Fiscal Year Rates					
a. Fiscal Year Employer/State Contribution Rates	19.03%	18.70%	14.35%	8.63%	5.62%*
b. Fiscal Year for Which Rate Applies	FY13	FY14	FY15	FY16	FY17

*Expected. Actual Rate to be determined.

Total
Change in Employer/State Contribution Rate
Due to (Gains) and Losses in Accrued Liabilities During the Last Five Fiscal Years
Resulting from Differences between Assumed Experience and Actual Experience

Type of (Gain) or Loss	Change in Employer/State Contribution Rate During Fiscal Year				
	2010	2011	2012	2013	2014
1. Health Experience	0.19%	(0.72)%	(2.02)%	(1.21)%	(8.59)%
2. Salary Experience	0.59%	(0.03)%	0.00%	(0.30)%	(0.43)%
3. Investment Experience	0.05%	0.46%	4.18%	2.44%	(6.31)%
4. Demographic Experience	(0.75)%	(0.03)%	(0.36)%	0.38%	1.75%
5. Contribution Shortfall	<u>0.01%</u>	<u>0.86%</u>	<u>0.71%</u>	<u>1.62%</u>	<u>1.24%</u>
6. (Gain) or Loss During Year From Experience, (1) + (2) + (3) + (4) + (5)	0.09%	0.54%	2.51%	2.93%	(12.34)%
7. Assumption and Method Changes	6.86%	0.00%	13.70%	0.00%	(33.50)%
8. System Benefit Changes	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>
9. Composite (Gain) or Loss During Year, (6) + (7) + (8)	6.95%	0.54%	16.21%	2.93%	(45.84)%
10. Beginning Total Employer/State Contribution Rate	<u>42.61%</u>	<u>49.56%</u>	<u>50.10%</u>	<u>66.31%</u>	<u>69.24%</u>
11. Ending Valuation Year Total Employer/State Contribution Rate, (9) + (10)	49.56%	50.10%	66.31%	69.24%	23.40%
12. Fiscal Year Rates					
a. Fiscal Year Employer/State Contribution Rates	49.56%	50.10%	44.25%	24.48%	23.40%*
b. Fiscal Year for Which Rate Applies	FY13	FY14	FY15	FY16	FY17

*Expected. Actual Rate to be determined.

Section 1.7 History of UAAL and Funded Ratio (\$'s in 000's)

Valuation Date	Aggregate Accrued Liability	Valuation Assets	Assets as a Percent of Accrued Liability	Unfunded Accrued Liabilities (UAL)
June 30, 2003	\$ 5,835,609	\$ 3,752,285	64.3%	\$ 2,083,324
June 30, 2004	\$ 6,123,600	\$ 3,845,370	62.8%	\$ 2,278,230
June 30, 2005	\$ 6,498,556	\$ 3,958,939	60.9%	\$ 2,539,617
June 30, 2006	\$ 7,229,851	\$ 4,141,700	57.3%	\$ 3,088,151
June 30, 2007	\$ 7,189,403	\$ 4,424,399	61.5%	\$ 2,765,004
June 30, 2008	\$ 7,619,178	\$ 4,936,976	64.8%	\$ 2,682,202
June 30, 2009	\$ 7,847,514	\$ 4,472,958	57.0%	\$ 3,374,556
June 30, 2010	\$ 8,847,788	\$ 4,739,128	53.6%	\$ 4,108,660
June 30, 2011	\$ 9,128,795	\$ 4,937,937	54.1%	\$ 4,190,858
June 30, 2012	\$ 9,346,444	\$ 4,869,154	52.1%	\$ 4,477,290
June 30, 2013	\$ 9,592,107	\$ 4,974,076	51.9%	\$ 4,618,031
June 30, 2014	\$ 9,841,032	\$ 6,019,274	61.2%	\$ 3,821,758

Section 2 Plan Assets

Section 2.1 Summary of Fair Value of Assets (\$'s in 000's)

As of June 30, 2014	Pension	Healthcare	Total Fair Value	Allocation Percent
Cash and Short-Term Investments				
– Cash and Cash Equivalents	\$ 123,198	\$ 73,011	\$ 196,209	3.3%
– Subtotal	\$ 123,198	\$ 73,011	\$ 196,209	3.3%
Fixed Income Investments				
– Domestic Fixed Income Pool	\$ 259,169	\$ 155,711	\$ 414,880	6.9%
– International Fixed Income Pool	67,319	40,446	107,765	1.8%
– High Yield Pool	100,527	60,397	160,924	2.7%
– Frontier Market Pool	17,571	10,557	28,128	0.5
– Treasury Inflation Protection Pool	6,236	3,747	9,983	0.2
– Emerging Debt Pool	<u>27,322</u>	<u>16,415</u>	<u>43,737</u>	<u>0.7%</u>
– Subtotal	\$ 478,144	\$ 287,273	\$ 765,417	12.7%
Equity Investments				
– Domestic Equity Pool	\$ 1,183,608	\$ 711,121	\$ 1,894,729	31.3%
– International Equity Pool	792,339	476,044	1,268,383	20.9%
– Private Equity Pool	308,116	185,118	493,234	8.2%
– Emerging Markets Equity Pool	<u>110,561</u>	<u>66,426</u>	<u>176,987</u>	<u>2.9%</u>
– Subtotal	\$ 2,394,624	\$ 1,438,709	\$ 3,833,333	63.4%
Other Investments				
– Real Estate Pool	\$ 302,179	\$ 181,491	\$ 483,670	8.0%
– Other Investments Pool	326,363	196,082	522,445	8.7%
– Absolute Return Pool	146,411	87,965	234,376	3.9%
– Other Assets	<u>0</u>	<u>1,497</u>	<u>1,497</u>	<u>nil</u>
– Subtotal	\$ 774,953	\$ 467,035	\$ 1,241,988	20.6%
Total Cash and Investments	\$ 3,770,919	\$ 2,266,028	\$ 6,036,947	100.0%
Net Accrued Receivables	<u>220</u>	<u>(17,893)</u>	<u>(17,673)</u>	
Net Assets	\$ 3,771,139	\$ 2,248,135	\$ 6,019,274	

Section 2.2 Changes in Fair Value of Assets (\$'s in 000's)

Fiscal Year 2014	Pension	Healthcare	Total Fair Value
1. Net Assets, June 30, 2013 (fair value)	\$ 3,279,130	\$ 1,866,421	\$ 5,145,551
2. Additions:			
a. Plan Member Contributions	\$ 47,724	\$ 263	\$ 47,987
b. Employer Contributions	37,571	31,980	69,551
c. Employer Legislative Relief	208,890	107,956	316,846
d. Interest and Dividend Income	65,502	38,458	103,960
e. Net Appreciation/(Depreciation) in Fair Value of Investments	547,138	317,964	865,102
f. Medicare Part D Subsidy	0	6,217	6,217
g. Other	<u>27</u>	<u>6</u>	<u>33</u>
h. Total Additions	\$ 906,852	\$ 502,844	\$ 1,409,696
3. Deductions:			
a. Medical Benefits	\$ 0	\$ 116,781	\$ 116,781
b. Retirement Benefits	396,614	0	396,614
c. Refunds of Contributions	2,387	0	2,387
d. Investment Expenses	12,682	11	12,693
e. Administrative Expenses	<u>3,160</u>	<u>4,338</u>	<u>7,498</u>
f. Total Deductions	\$ 414,843	\$ 121,130	\$ 535,973
4. Net Assets, June 30, 2014 (fair value)	\$ 3,771,139	\$ 2,248,135	\$ 6,019,274
Approximate Fair Value Investment Return Rate During FY14 Net of All Expenses	18.1%	18.4%	18.2%
Liquidity Factor	8.8	17.6	10.8

Section 2.3 Actuarial Value of Assets

The actuarial value of assets was set equal to the fair value at June 30, 2014 and the 20% corridor was eliminated. Future investment gains and losses will be recognized 20% per year over the next 5 years.

	Pension	Healthcare	Total
1. Deferral of Investment Return/(Loss) for FY14			
a. Fair Value, June 30, 2013	\$ 3,279,130	\$ 1,866,421	\$ 5,145,551
b. Contributions for FY14	294,185	140,199	434,384
c. Medicare Part D Subsidy	0	6,217	6,217
d. Benefit Payments for FY14	399,001	116,781	515,782
e. Actual Investment Return (<i>net of expenses</i>)	596,825	352,079	948,904
f. Expected Return Rate (<i>net of expenses</i>)	8.00%	8.00%	8.00%
g. Expected Return - Weighted for Timing	258,218	150,476	408,694
h. Investment Gain/(Loss) for the Year (<i>e. – g.</i>)	338,607	201,603	540,210
i. Deferred Investment Return/(Loss)	\$ 0	\$ 0	\$ 0
2. Actuarial Value, June 30, 2014			
a. Fair Value, June 30, 2014	\$ 3,771,139	\$ 2,248,135	\$ 6,019,274
b. 2014 Deferred Investment Return/(Loss)	0	0	0
c. Actuarial Value, June 30, 2014 (<i>a. – b.</i>)	\$ 3,771,139	\$ 2,248,135	\$ 6,019,274
d. Ratio of Actuarial Value of Assets to Fair Value of Assets	100.0%	100.0%	100.0%
e. Approximate Actuarial Value Investment Return Rate During FY14 Net of All Expenses	22.6%	22.8%	22.7%

Section 2.4 Historical Asset Rate of Return

Year Ending	Actuarial Value		Fair Value	
	Annual	Cumulative	Annual	Cumulative
June 30, 2005	9.1%	9.1%	8.5%	8.5%
June 30, 2006	9.6%	9.3%	11.4%	9.9%
June 30, 2007	11.9%	10.2%	18.5%	12.7%
June 30, 2008	10.2%	10.2%	(3.0)%	8.6%
June 30, 2009	(7.9)%	6.3%	(21.0)%	1.9%
June 30, 2010	8.1%	6.6%	10.6%	3.3%
June 30, 2011	6.9%	6.6%	20.5%	5.6%
June 30, 2012	0.7%	5.9%	0.2%	4.9%
June 30, 2013	3.7%	5.6%	12.2%	5.7%
June 30, 2014	22.7%	7.2%	18.2%	6.9%

Section 3 Accounting Information

Section 3.1 Historical Exhibits (\$'s in 000's)

Schedule of Employer Contributions

The following shows pension disclosure under GASB No. 25 for fiscal years ending 2007 through 2013.

Fiscal Year Ended June 30	Total Annual Required Contribution	Percentage Contributed		
		By Employer	By State	Total
2013	\$ 259,786	14.4%	75.8%	90.2%
2012	229,509	16.6%	68.6%	85.2%
2011	167,978	19.5%	65.1%	84.6%
2010*	170,788	19.8%	58.8%	78.6%
2009	94,388	28.7%	110.6%	139.3%
2008	134,544	23.3%	82.7%	106.0%
2007	169,974	62.2%	0.00%	62.2%

* The ARC and percentage contributed is based on Buck's calculation and does not match the CAFR. The percentage contributed includes the legal settlement in FY10, net of fees, as well as the Medicare Part D subsidy contributed by the State to the Healthcare Fund.

Schedule of Funding Progress
(\$'s in 000's)

The exhibit below shows the combined pension and postemployment healthcare disclosure under GASB No. 25, prior to 2006.

Valuation Date	Aggregate Accrued Liability	Valuation Assets	Assets as a Percent of Accrued Liability	Unfunded Accrued Liabilities (UAL)	Annual Active Member Payroll	UAL as a Percent of Annual Active Member Payroll
June 30, 2005	\$ 6,498,556	\$ 3,958,939	60.9%	\$ 2,539,617	\$ 535,837	474.0%
June 30, 2004 ²	\$ 6,123,600	\$ 3,845,370	62.8%	\$ 2,278,230	\$ 522,421	436.1%
June 30, 2003	\$ 5,835,609	\$ 3,752,285	64.3%	\$ 2,083,324	\$ 532,630	391.1%
June 30, 2002 ^{1 2 3}	\$ 5,411,642	\$ 3,689,036	68.2%	\$ 1,722,606	\$ 509,437	338.1%
June 30, 2001	\$ 4,603,147	\$ 4,372,229	95.0%	\$ 230,918	\$ 496,188	46.5%
June 30, 2000 ^{1 2 3}	\$ 4,198,868	\$ 4,184,015	99.6%	\$ 14,853	\$ 482,571	3.1%
June 30, 1999	\$ 3,720,954	\$ 3,815,633	102.5%	\$ N/A	\$ 466,414	N/A
June 30, 1998	\$ 3,528,757	\$ 3,446,070	97.7%	\$ 82,687	\$ 469,433	17.6%
June 30, 1997	\$ 3,320,069	\$ 3,120,044	94.0%	\$ 200,025	\$ 466,455	42.9%

¹ Change in Asset Valuation Method

² Change of Assumptions

³ Change in Methods

Section 3.2 Pension – GASB 67

Notes to the Financial Statements for the Year Ended June 30, 2014

Summary of Significant Accounting Policies

Method used to value investments. Investments are reported at fair value.

Plan Description

Plan administration. The State of Alaska administers the Teachers' Retirement System (TRS), a cost-sharing multiple-employer defined benefit pension plan that provides pensions for all full-time employees of participating employers. The plan was closed to new members on July 1, 2006.

Management of TRS is vested in the Alaska Retirement Management Board.

Plan membership. At June 30, 2013, pension plan membership consisted of the following:

Inactive plan members or beneficiaries currently receiving benefits	11,705
Inactive plan members entitled to but not yet receiving benefits	3,354
Active plan members	<u>6,352</u>
Total	21,411

Benefits provided. Please see Section 6.1 for a summary of plan provisions.

Contributions. The Board establishes contributions based on an actuarially determined contribution rate recommended by an independent actuary pursuant to State statutes. The actuarially determined contribution rate is the estimated amount as a percentage of payroll necessary to finance the costs of benefits earned by plan members during the year, with an additional amount to finance any unfunded accrued liability. For the year ended June 30, 2014, the participating employers and the State contributed \$246,461,000 to the plan.

Investments

Rate of return. For the year ended June 30, 2014, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 18.10%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Receivables

N/A.

Net Pension Liability (Asset)

The components of the net pension liability (asset) at June 30, 2014, were as follows (\$ in thousands):

Total pension liability	\$	6,770,201
Plan fiduciary net position		<u>(3,771,139)</u>
Employers net pension liability (asset)	\$	2,999,062
Plan fiduciary net position as a percentage of the total pension liability (asset)		55.70%

Actuarial Assumptions

The total pension liability was determined by an actuarial valuation as of June 30, 2013, using the following actuarial assumptions, applied to all periods included in the measurement, and rolled forward to the measurement date of June 30, 2014:

Inflation	3.12%
Salary increases	Graded by service, from 6.11% to 3.62%
Investment rate of return	8.00%, net of pension plan investment expenses. This is based on an average inflation rate of 3.12% and a real rate of return of 4.88%.

Mortality rates were based on the 1994 Group Annuity Mortality (GAM) Sex-distinct Table 1994 Base Year without margin projected to 2013 using Projection Scale AA, adjusted 55% for females and 45% for males for pre-termination mortality and the 1994 GAM Sex-distinct Table 1994 Base Year without margin projected to 2013 using Projection Scale AA, with a 3-year setback for females and 4-year setback for males for post-termination mortality.

The actuarial assumptions used in the June 30, 2013 actuarial valuation were based on the results of an actuarial experience study for the period from July 1, 2005 to June 30, 2009, resulting in changes in actuarial assumptions adopted by the Alaska Retirement Management Board to better reflect expected future experience.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and adding expected inflation. Best estimates of arithmetic rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2010 are summarized in the following table (note that the rates shown below exclude the inflation component):

<u>Asset Class</u>	<u>Long-Term Expected Real Rate of Return</u>
Domestic Equity	6.77%
International Equity	7.50%
Private Equity	10.86%
Fixed Income	2.05%
Real Estate	3.63%
Absolute Return	4.80%

Discount rate. The discount rate used to measure the total pension liability was 8.00%. The projection of cash flows used to determine the discount rate assumed that Employer and State contributions will continue to follow the current funding policy which meets State statutes. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the net pension liability to changes in the discount rate. The following presents the net pension liability, calculated using the discount rate of 8.00%, as well as what the System's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (7.00%) or 1-percentage-point higher (9.00%) than the current rate (\$ in thousands):

	1% Decrease (7.0%)	Current Discount Rate (8.0%)	1% Increase (9.0%)
Net Pension Liability (Asset)	\$ 3,776,983	\$ 2,999,062	\$ 2,346,163

Schedules of Required Supplementary Information

Schedule of Changes in the Net Pension Liability (Asset) and Related Ratios (\$ in thousands)

FYE June 30, 2014	
Total pension liability	
Service cost	\$ 64,324
Interest	515,325
Changes of benefit terms	0
Differences between expected and actual experience	0
Changes of assumptions	0
Benefit payments	<u>(399,001)</u>
Net change in total pension liability	\$ 180,648
Total pension liability-beginning	<u>6,589,553</u>
Total pension liability-ending (a)	\$ 6,770,201
Plan fiduciary net pension	
Contributions – employers and state	\$ 246,461
Contributions – members	47,724
Net investment income	599,958
Benefit payments, including refunds of member contributions	(399,001)
Administrative expenses	(3,160)
Other	<u>27</u>
Net change in Plan fiduciary net position	\$ 492,009
Plan fiduciary net position-beginning	<u>3,279,130</u>
Plan fiduciary net position-ending (b)	\$ 3,771,139
Plan's net pension liability (asset)-ending (a)-(b)	\$ 2,999,062
Plan fiduciary net position as a percentage of the total pension liability	55.70%
Covered-employee payroll	\$ 514,035
Net pension liability as a percentage of covered-employee payroll	583.44%

Notes to Schedule

Benefit changes. None.

Changes of assumptions. None.

Schedule of Employer Contributions

	FYE June 30, 2014
Actuarially determined contribution	\$ 240,366
Contributions related to the actuarially determined contribution	<u>246,461</u>
Contribution deficiency (excess)	\$ (6,095)
Covered employee payroll	\$ 514,035
Contributions as a percentage of covered employee payroll	47.95%

Notes to Schedule

Valuation date: June 30, 2013

Actuarially determined contribution rates are calculated as of June 30th, two years prior to the fiscal year in which contributions are reported.

Methods and assumptions used to determine contribution rates:

Actuarial cost method:	Entry Age Normal.
Amortization method	Level dollar, closed.
Amortization period	25 years, layered.
Equivalent single amortization period	17 years.
Asset valuation method	Actuarial value that smooth's investment gains and losses over 5 years, constrained to a range of 80% - 120% of fair value.
Inflation	3.12% per annum.
Salary increases	Ranges from 6.11% to 3.62% based on service
Investment rate of return	8.00%, net of pension plan investment expenses. This is based on an average inflation rate of 3.12% and a real rate of return of 4.88%.
Retirement age	An age-related assumption is used for participants not yet receiving payments.

Mortality

1994 Group Annuity Mortality (GAM) Sex-distinct Table 1994 Base Year without margin projected to 2013 using Projection Scale AA, adjusted 55% for females and 45% for males for pre-termination mortality and the 1994 GAM Sex-distinct Table 1994 Base Year without margin projected to 2013 using Projection Scale AA, with a 3-year setback for females and 4-year setback for males for post-termination mortality.

Other information

Please see Section 6 of the 2013 actuarial report.

Section 3.3 Postemployment Healthcare (\$'s in 000's)

The exhibit below shows the postemployment healthcare disclosure without regard to the Medicare Part D subsidy under GASB No. 43.

Valuation Date	Aggregate Accrued Liability	Valuation Assets	Assets as a Percent of Accrued Liability	Unfunded Accrued Liabilities (UAL)	Annual Active Member Payroll	UAL as a Percent of Annual Active Member Payroll
June 30, 2014 ¹ – 4.25%	\$ 3,114,113	\$ 2,248,135	72.2%	\$ 865,978	\$ 523,580	165.4%
June 30, 2013 – 5.08%	\$ 5,002,345	\$ 1,803,763	36.1%	\$ 3,198,582	\$ 550,044	581.5%
June 30, 2012 – 5.01%	\$ 5,046,942	\$ 1,674,160	33.2%	\$ 3,372,782	\$ 561,971	600.2%
June 30, 2011 – 7.08%	\$ 3,635,492	\$ 1,591,988	43.8%	\$ 2,043,504	\$ 584,068	349.9%
June 30, 2010 ¹ – 8.00%	\$ 3,076,388	\$ 1,479,260	48.1%	\$ 1,597,128	\$ 564,887	282.7%
June 30, 2009 – 4.50%	\$ 4,604,820	\$ 1,357,239	29.5%	\$ 3,247,581	\$ 557,026	583.0%
June 30, 2008 ¹ 4.50%	\$ 4,648,055	\$ 1,266,890	27.3%	\$ 3,381,165	\$ 549,148	615.7%
June 30, 2007 – 4.50%	\$ 4,059,573	\$ 982,532	24.2%	\$ 3,077,041	\$ 554,245	552.2%
June 30, 2006 ¹ – 4.50%	\$ 4,288,707	\$ 844,766	19.7%	\$ 3,443,941	\$ 574,409	599.6%

For illustration, the exhibit below shows the postemployment healthcare disclosure without regard to the Medicare Part D subsidy discounted at 8.00% and at 4.25% per annum under GASB No. 43 for the current year. These values show the minimum and maximum accrued liability amounts depending on the portion of ARC actually contributed.

Valuation Date	Aggregate Accrued Liability	Valuation Assets	Assets as a Percent of Accrued Liability	Unfunded Accrued Liabilities (UAL)	Annual Active Member Payroll	UAL as a Percent of Annual Active Member Payroll
June 30, 2014 – 8.00%	\$ 3,114,113	\$ 2,248,135	72.2%	\$ 865,978	\$ 523,580	165.4%
June 30, 2014 – 4.25%	\$ 5,373,322	\$ 2,248,135	41.8%	\$ 3,125,187	\$ 523,580	596.9%

¹ Change in assumptions

Schedule of Employer Contributions (\$'s in 000's)

The following shows postemployment healthcare disclosure without regard to the Medicare Part D subsidy under GASB No. 43 for fiscal year ending 2007 and later.

Fiscal Year Ended June 30	Total Annual Required Contribution	Percentage Contributed		
		By Employer	By State	Total
2014	\$ 320,797	10.0%	35.6%	45.6%
2013	330,411	10.7%	33.3%	44.0%
2012	192,700	18.8%	46.6%	65.4%
2011	167,686	25.8%	51.5%	77.3%
2010*	312,922	13.6%	38.8%	52.4%
2009	164,171	28.7%	62.1%	90.8%
2008	185,271	23.6%	85.7%	109.3%
2007	76,879	62.2%	0.00%	62.2%

* The ARC and percentage contributed is based on Buck's calculation and does not match the CAFR. The percentage contributed in includes the legal settlement in FY10, net of fees, as well as the Medicare Part D subsidy contributed by the State to the Healthcare Fund.

The exhibit below shows the annual required contribution (ARC) as a percentage of pay for pension and healthcare.

ARC (% of Pay)			
Valuation Date	Fiscal Year	Healthcare	Healthcare Discount Rate
June 30, 2005	FY08	54.45%	4.50%
June 30, 2006	FY09	52.20%	4.50%
June 30, 2007	FY10	52.42%	4.50%
June 30, 2008	FY11	28.71%	8.25%
June 30, 2009	FY12	34.29%	7.08%
June 30, 2010*	FY13	60.07%	5.01%
June 30, 2011	FY14	61.27%	5.08%
June 30, 2012	FY15	70.04%	4.25%
June 30, 2013	FY16	70.97%	4.31%
June 30, 2014	FY17	64.72%	4.43%

*Change in discount rate assumptions effective June 30, 2010

ARC is based on DB salary only and a level dollar amortization of the unfunded liability.

Section 3.4 Notes to Trend Data

Actuarial Assumptions, Methods and Additional Information under GASB

Valuation Date	June 30, 2014
Actuarial Cost Method	Entry Age Normal Level Percentage of Pay Normal Cost Basis for Pension Level Percentage of Pay Normal Cost Basis for Healthcare
Amortization Method	Level Percentage of Pay, closed
Equivalent Single Amortization Period	25 years
Asset Valuation Method	5-year smoothed market
Actuarial Assumptions:	
Investment rate of return*	8.00% for pension, 5.08% for healthcare
Projected salary increases	6.11% for first 5 years of service grading down to 3.62% after 20 years
*Includes price inflation at	3.12%
Cost-of-living adjustment	Postretirement Pension Adjustment as described in Section 6.1, item (14)

GASB 43 requires that the discount rate used in the valuation be the estimated long-term yield on investments that are expected to finance postemployment benefits. Depending on the method by which a plan is financed, the relevant investments could be plan assets, employer assets or a combination of plan and employer assets. The investment return should reflect the nature and the mix of both current and expected investments and the basis used to determine the actuarial value of assets.

The State of Alaska Teachers' Retirement System's retiree healthcare benefits are partially funded. GASB outlines two reasonable methods of developing a blended discount rate when a plan is partially funded. These methods base the proportion of assumed plan and employer asset returns on 1) the funded ratio and 2) the percentage of the annual required contribution (ARC) actually being contributed to the plan. The State of Alaska has utilized the second methodology to develop a discount rate of 5.08% as of June 30, 2012, to be used for fiscal 2015 disclosure.

The development of the discount rate used for the FY15 healthcare liabilities valuation disclosure purposes is summarized below:

Investment Returns

Plan Assets (Long-Term Return)	=	8.00%
Employer Assets (Estimated Short-Term Return)	=	4.25%

Based on Percentage of ARC Contributed during FY12*

1. Contribution Allocated to Healthcare	=	22.51%
2. Annual Required Contribution, Funding Assumptions	=	28.71%
3. Pay-as-you-go Contribution	=	20.74%
4. Portion of ARC Contributed: [(1-3) / (2-3), not less than 0%, not more than 100%]	=	22.25%
5. Multiplied by long-term investment return	=	1.78%
6. Portion of ARC not Contributed: [100% - (4)]	=	77.75%
7. Multiplied by short-term investment return	=	3.30%
8. Total: (5) + (7)	=	5.08%

*It is assumed that fiscal 2010 contributions allocated to healthcare ARC for funding purposes and pay-as-you-go contributions are used to derive the GASB 43 discount rate applied to the June 30, 2012 valuation (fiscal 2013), which in turn drives the fiscal 2015 GASB 43 ARC.

Using the GASB 43 discount rate determined above and disregarding future Medicare Part D payments, the fiscal 2015 employer ARC rate for accounting purposes is 61.27% of pay for healthcare benefits and 112.18% of pay for healthcare and pension benefits combined.

Section 3.5 Solvency Test (\$'s in 000's)

The exhibit below shows the pension Solvency Test for valuation dates June 30, 2005 and later.

Valuation Date	Pension Aggregate Accrued Liability For:			Pension Valuation Assets	Portion of Accrued Liabilities Covered by Assets:		
	(1) Active Member Contributions	(2) Inactive Members	(3) Active Members (Employer-Financed Portion)		(1)	(2)	(3)
June 30, 2014	\$ 718,694	\$ 5,042,250	\$ 1,160,418	\$ 3,771,139	100.0%	60.5%	0.0%
June 30, 2013	726,139	4,726,282	1,137,132	3,170,313	100.0%	51.7%	0.0%
June 30, 2012	727,435	4,532,982	1,139,360	3,194,994	100.0%	54.4%	0.0%
June 30, 2011	717,819	4,352,035	1,126,250	3,345,949	100.0%	60.4%	0.0%
June 30, 2010 ¹	716,675	4,153,119	1,137,187	3,259,868	100.0%	61.2%	0.0%
June 30, 2009	692,105	3,815,020	956,862	3,115,719	100.0%	63.5%	0.0%
June 30, 2008	654,662	3,700,812	876,180	3,670,086	100.0%	81.5%	0.0%
June 30, 2007	638,420	3,567,894	837,134	3,441,867	100.0%	78.6%	0.0%
June 30, 2006 ^{1,2}	615,207	3,432,703	811,426	3,296,934	100.0%	78.1%	0.0%
June 30, 2005	589,169	3,200,339	545,077	3,184,976 ³	100.0%	81.1%	0.0%

¹ Change in Assumptions

² Change in Methods

³ The pension and postemployment healthcare valuation assets were allocated using a ratio of fair value of assets as of June 30, 2005

The exhibit below shows the postemployment healthcare Solvency Test for valuation dates June 30, 2005 and later.

Valuation Date	Postemployment Healthcare Aggregate Accrued Liability For:			Postemployment Healthcare Valuation Assets	Portion of Accrued Liabilities Covered by Assets:		
	(1) Active Member Contributions	(2) Inactive Members	(3) Active Members (Employer-Financed Portion)		(1)	(2)	(3)
June 30, 2014 ^{1 2}	\$ 0	\$ 2,008,223	\$ 911,447	\$ 2,248,135	100.0%	100.0%	26.3%
June 30, 2013	0	2,012,114	990,440	1,803,763	100.0%	89.6%	0.0%
June 30, 2012	0	1,933,288	1,013,379	1,674,160	100.0%	86.6%	0.0%
June 30, 2011	0	1,879,564	1,053,127	1,591,988	100.0%	84.7%	0.0%
June 30, 2010 ¹	0	1,755,961	1,084,846	1,479,260	100.0%	84.2%	0.0%
June 30, 2009	0	1,477,788	905,739	1,357,239	100.0%	91.8%	0.0%
June 30, 2008 ¹	0	1,480,864	906,660	1,266,890	100.0%	85.6%	0.0%
June 30, 2007	0	1,344,131	801,824	982,532	100.0%	73.1%	0.0%
June 30, 2006 ^{1 2}	0	1,493,219	877,296	844,766	100.0%	56.6%	0.0%
June 30, 2005	0	1,493,837	670,134	773,963 ³	100.0%	51.8%	0.0%

Healthcare liabilities are calculated using the funding assumptions (i.e., funding investment return and net of Medicare Part D subsidy).

¹ Change in Assumptions

² Change in Methods

³ The pension and postemployment healthcare valuation assets were allocated using a ratio of fair value of assets as of June 30, 2005

The exhibit below shows the combined pension and postemployment healthcare Solvency Test for valuation dates June 30, 2010 and before.

Valuation Date	Aggregate Accrued Liability For:			Valuation Assets	Portion of Accrued Liabilities Covered by Assets:		
	(1) Active Member Contributions	(2) Inactive Members	(3) Active Members (Employer-Financed Portion)		(1)	(2)	(3)
June 30, 2010 ¹	\$ 716,875	\$ 5,909,080	\$ 2,222,033	\$ 4,739,128	100.0%	68.1%	0.0%
June 30, 2009	692,105	5,292,808	1,862,601	4,472,958	100.0%	71.4%	0.0%
June 30, 2008 ¹	654,662	5,181,676	1,782,840	4,936,976	100.0%	82.6%	0.0%
June 30, 2007	638,420	4,912,025	1,638,958	4,424,399	100.0%	77.1%	0.0%
June 30, 2006 ^{1 2}	615,207	4,925,922	1,688,722	4,141,700	100.0%	71.6%	0.0%
June 30, 2005	589,169	4,694,176	1,215,211	3,958,939	100.0%	71.8%	0.0%
June 30, 2004 ¹	569,435	4,423,036	1,131,129	3,845,370	100.0%	74.1%	0.0%
June 30, 2003	548,947	4,105,445	1,181,217	3,752,285	100.0%	78.0%	0.0%
June 30, 2002 ^{1 2 3}	523,142	3,755,882	1,132,618	3,689,036	100.0%	84.3%	0.0%
June 30, 2001	533,752	3,213,431	855,964	4,372,229	100.0%	100.0%	73.0%

Healthcare liabilities are calculated using the funding assumptions (i.e., funding investment return and net of Medicare Part D subsidy).

¹ Change in Assumptions

² Change in Methods

³ Change in Asset Valuation Method

Section 4 Projections

Section 4.1 Projection Assumptions and Methods

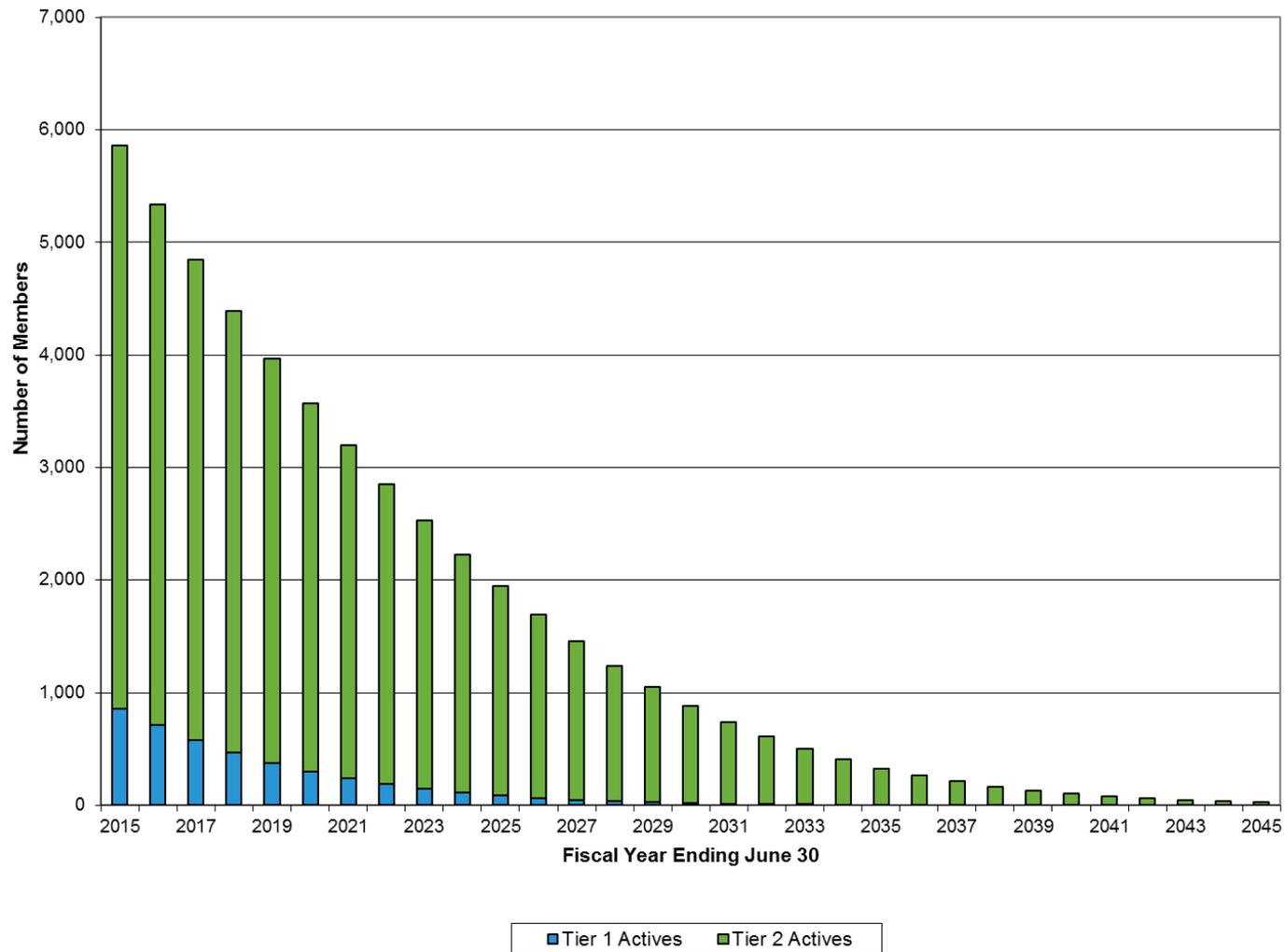
Key Assumptions

- 8.00% investment return on the Fair Value of Assets in all future years.
- The Actuarial Value of Assets is re-initialized to Fair Value as of June 30, 2014. Future values of the Actuarial Value of Assets will reflect the deferred gains and losses generated by the smoothing method. There are currently no deferred amounts and none are projected since the assumed investment return of 8% per year is expected to be exactly realized.
- Actuarial assumptions and methods as described in Section 6. All future demographic experience is assumed to be exactly realized.
- The actuarially calculated contribution rate using a two-year roll forward approach is adopted each year.
- No new DB Plan members enter Tiers 1 and 2.
- Projections assume a 0% increase in the total active member population. All new members are expected to enter the DCR plan and contribution rates are determined as a percent of total DB and DCR payroll, combined.
- For the Sensitivity Analysis, all assumptions and methods are the same except investment returns on the Fair Value of Assets are assumed as follows:
 - Base Case: 8.00% for all future years
 - Optimistic: 8.75% for all future years
 - Pessimistic: 7.25% for all future years

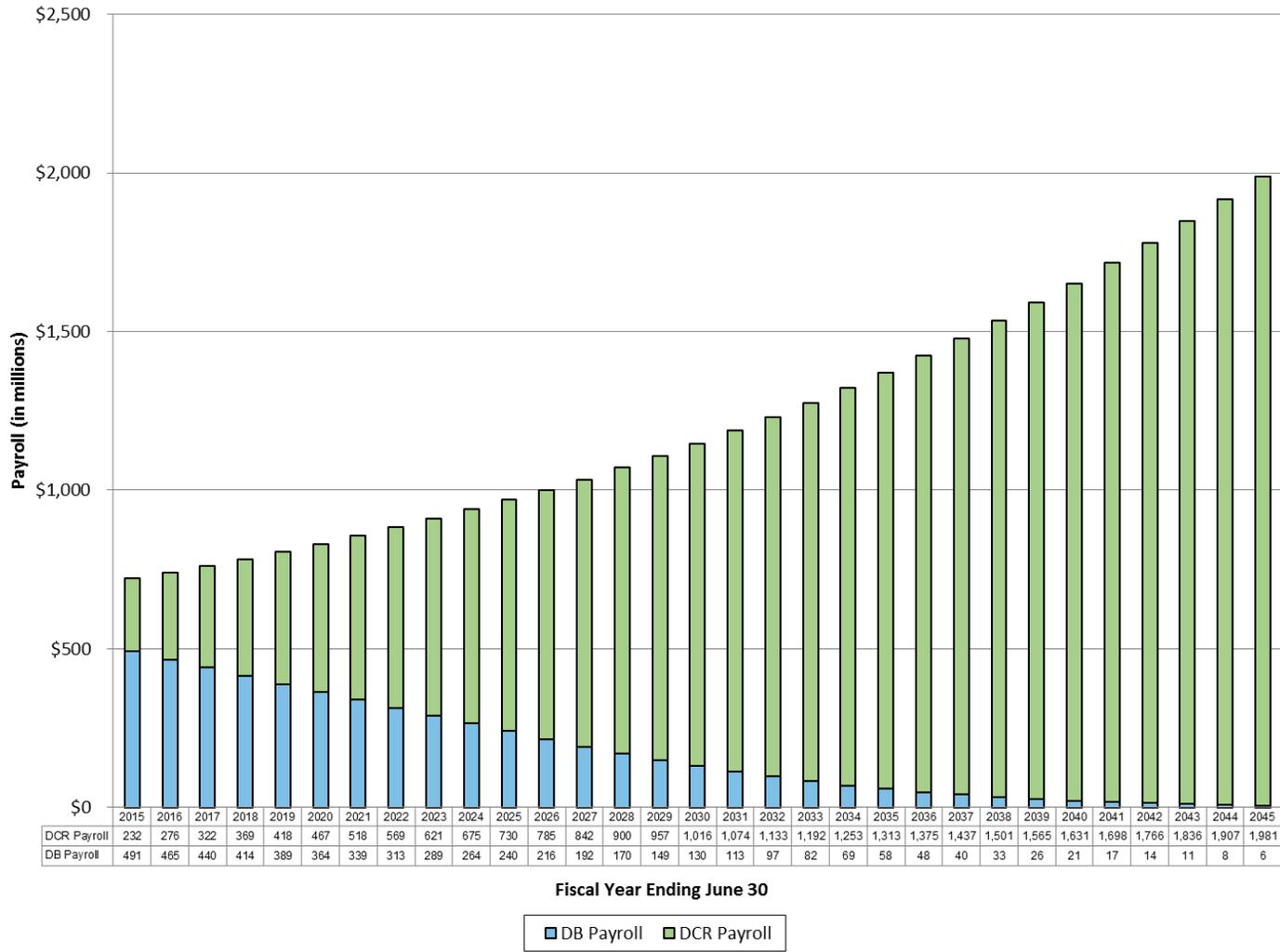
In each case, liabilities have been projected using 8.00% as the discount rate for future benefit payments. These scenarios are intended to illustrate the impact if investment rates are different than the 8.00% assumed investment return. They do not illustrate the effect of changing the assumed discount rate for determining liabilities.

Section 4.2 Membership Projection

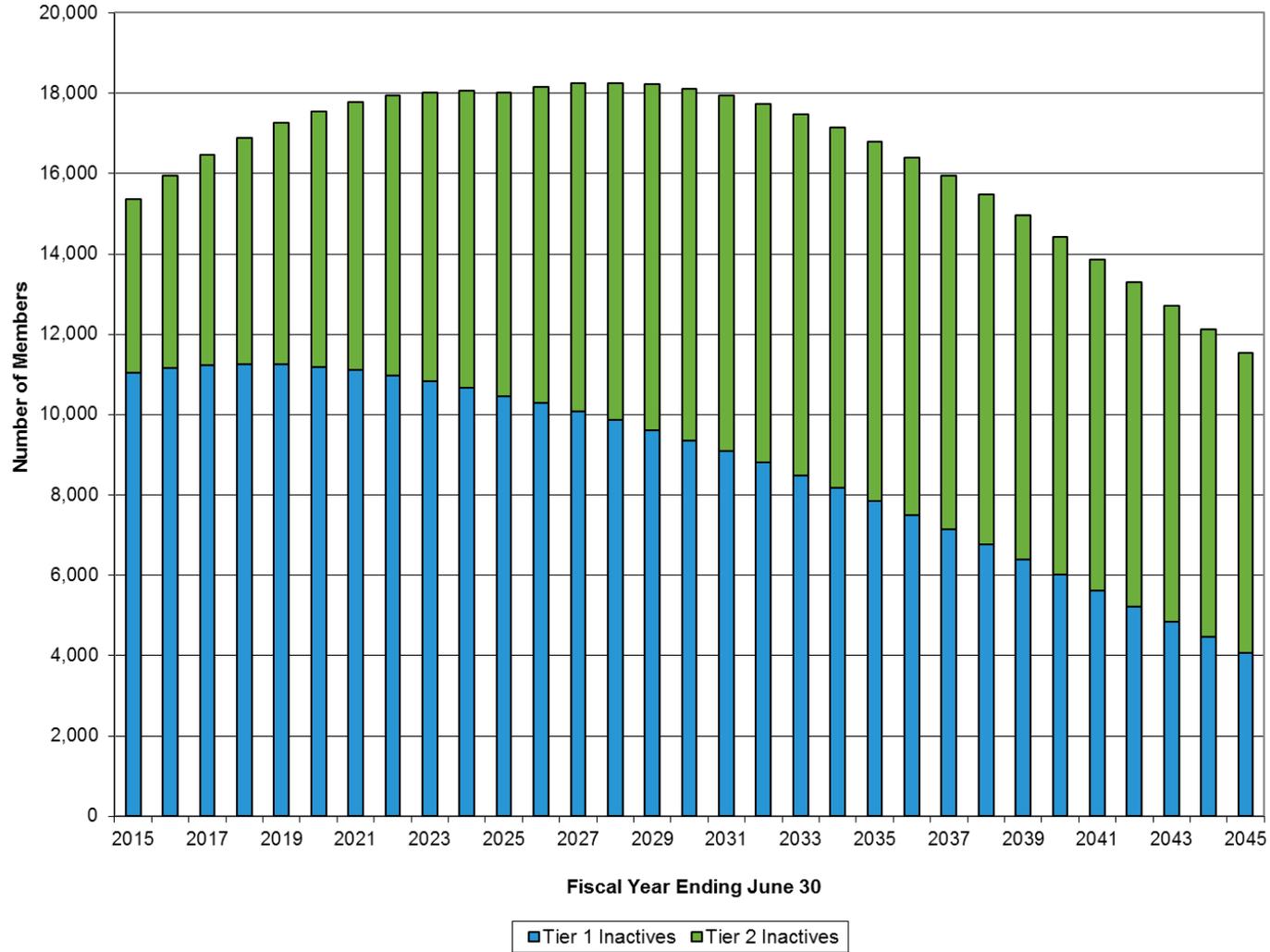
Projected Active Member Count



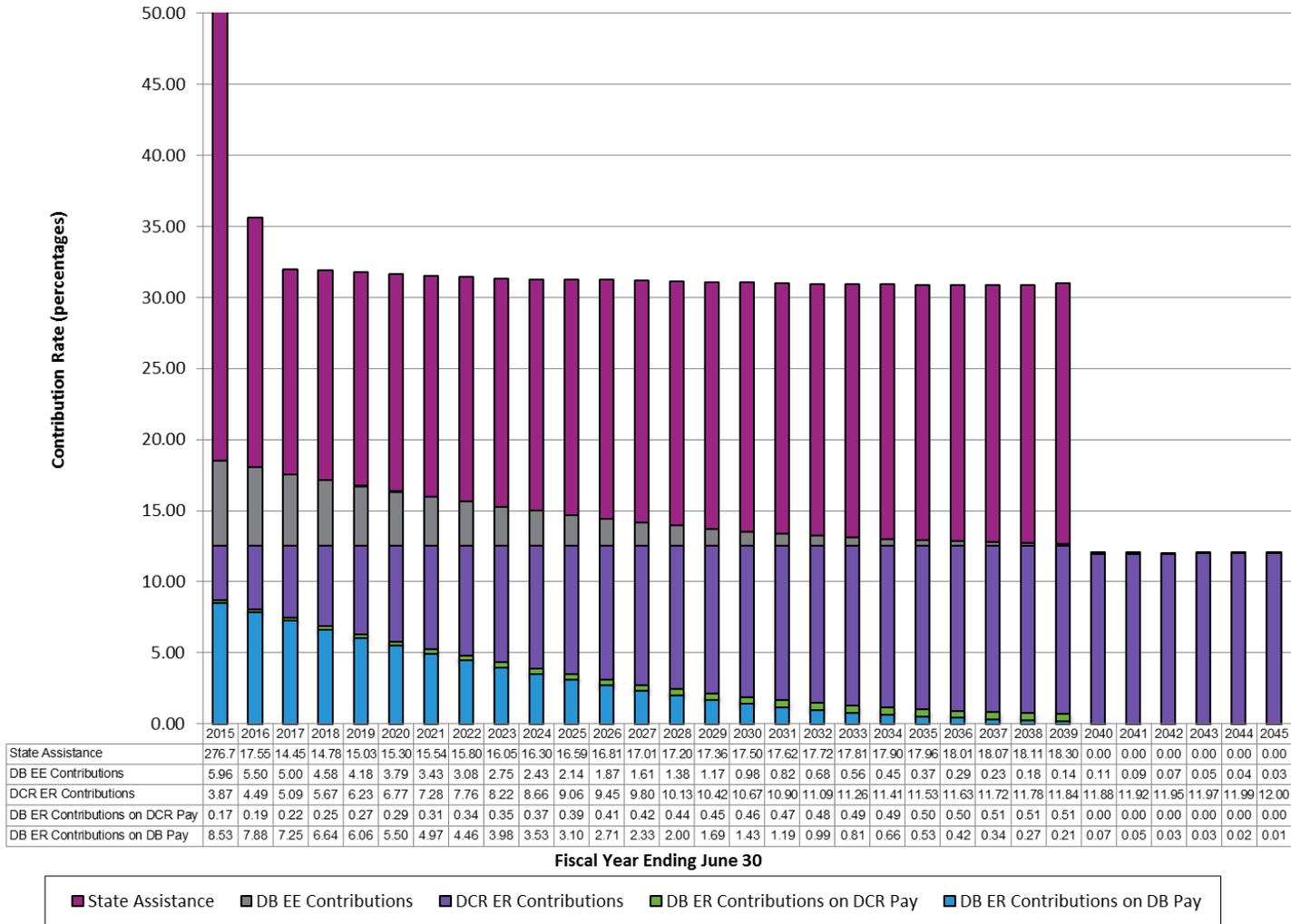
Projected DB and DCR Payroll



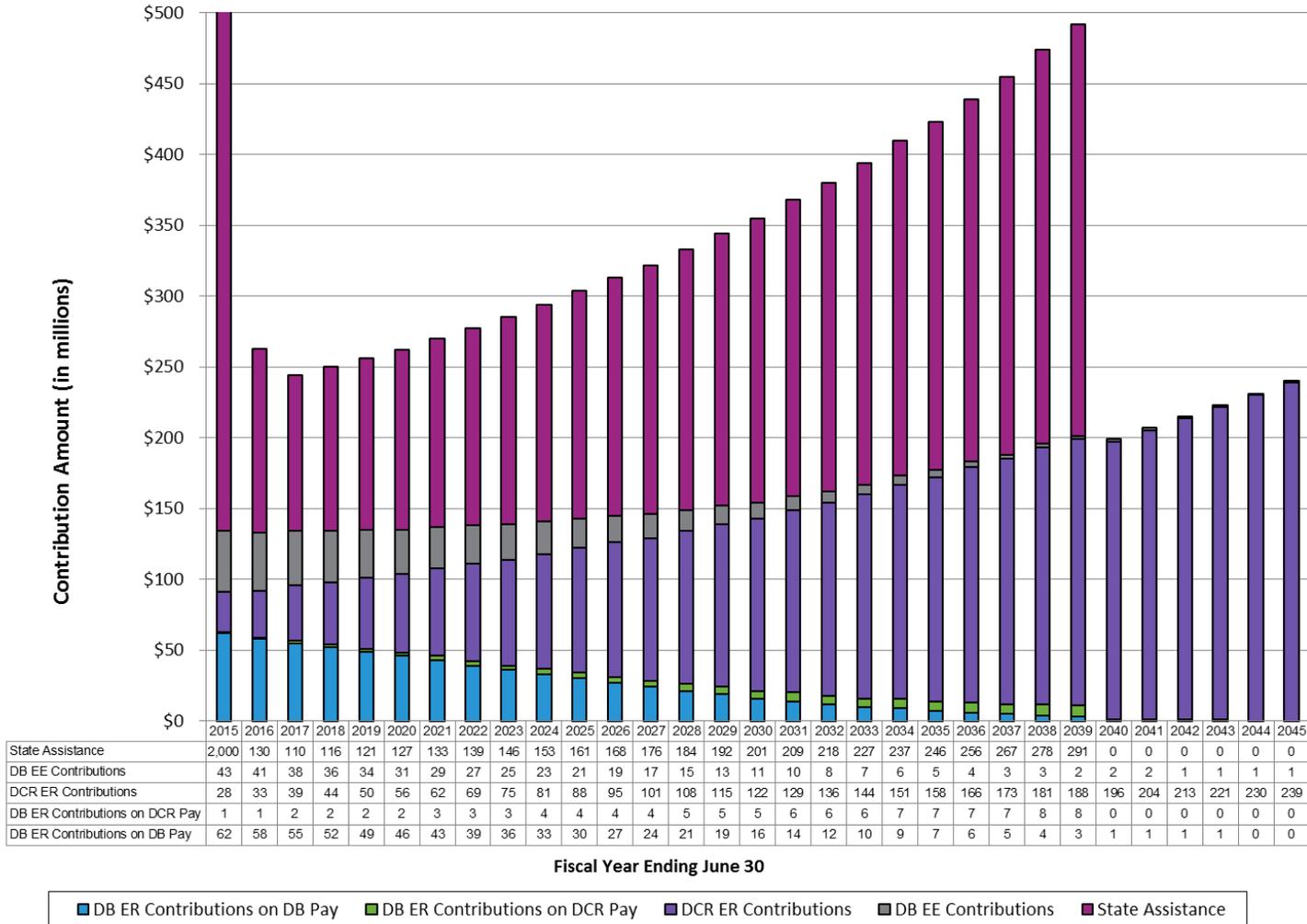
Projected Inactive Member Count



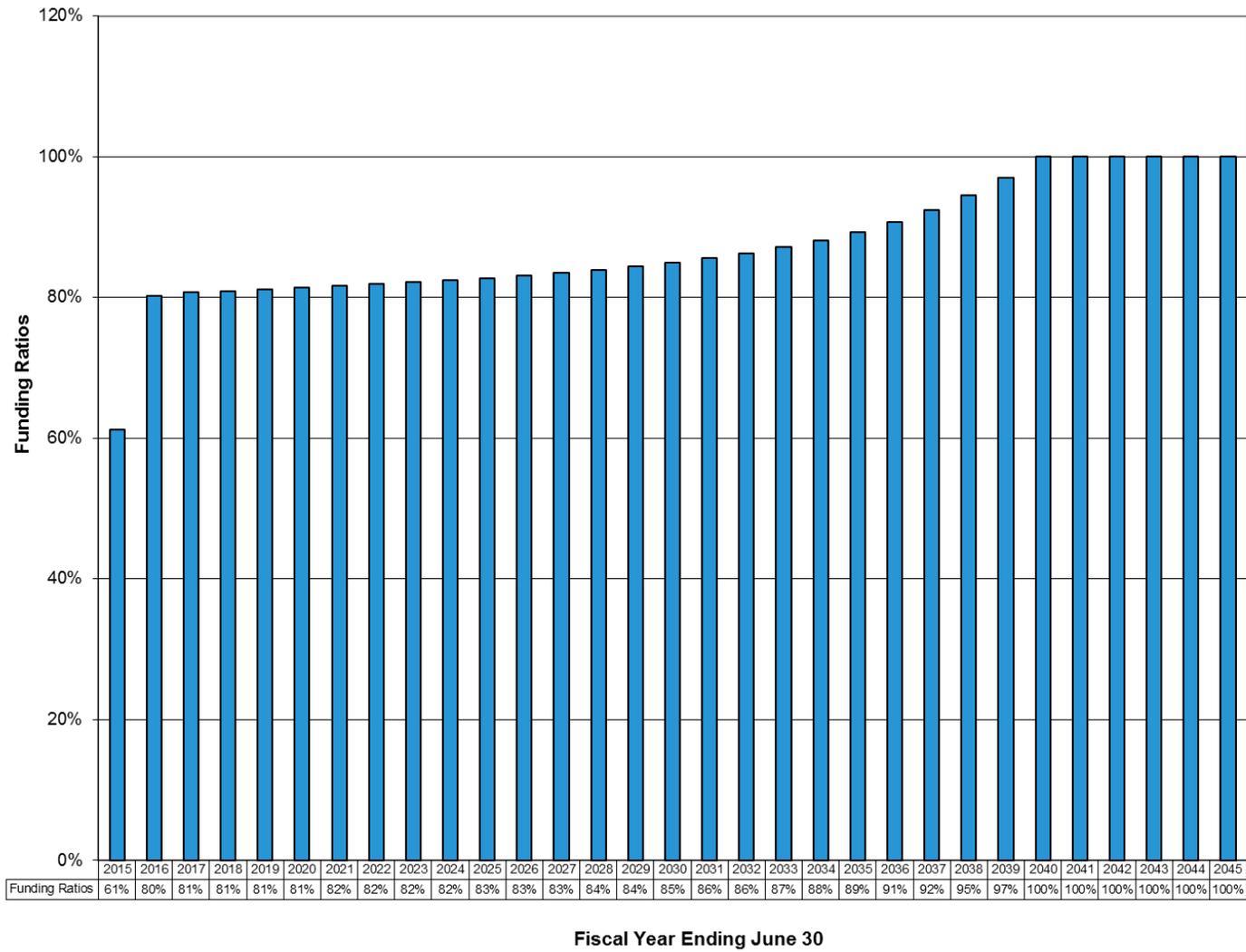
Section 4.3 Projection of Employer/State Contribution Rates (Based on Total DB and DCR Payroll)



Section 4.4 Projection of Employer/State Contribution Amounts



Section 4.5 Projection of Funding Ratios



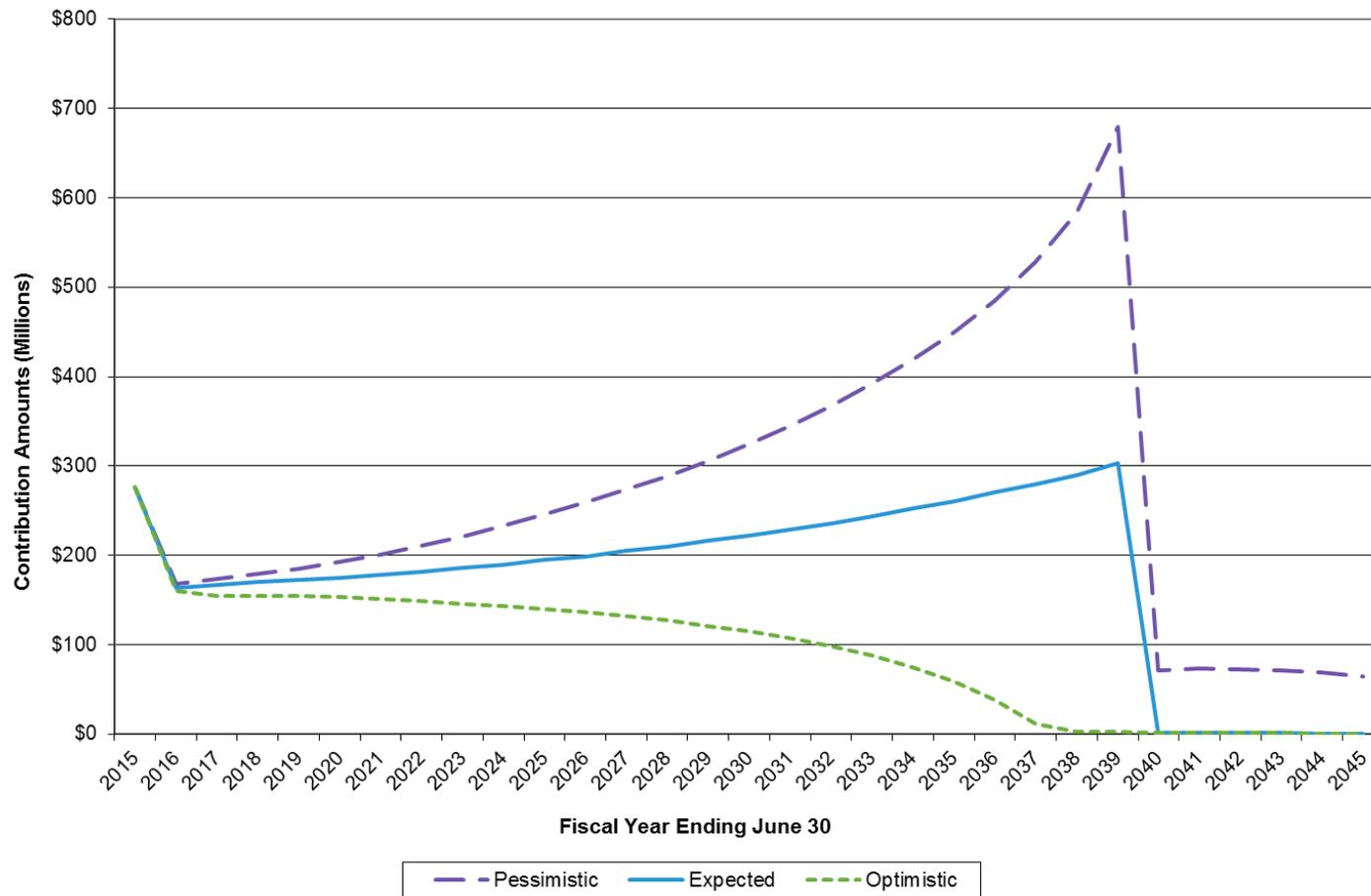
Section 4.6 Table of Projected Actuarial Results

State of Alaska TRS Financial Projections (\$ in Thousands)

Fiscal Year End	FY 15 Investment Return 8.00%				Flow Amounts During Following 12 Months										Recognized Asset Gain/(Loss)	Ending Actuarial Assets			
	Valuation Amounts on July 1 (Beginning of Fiscal Year)				Total Salaries	Er/State Ctb Rate	DCR Ctb Rate	Total Ctb Rate	Employer Contribs	State Contribs	Employee Contribs	Total Contribs	Benefit Payments	Net Contribs			Investment Earnings		
	Actuarial Assets	Accrued Liability	Funding Ratio	Surplus (Deficit)															
2015	\$6,019,274	\$9,841,032	61.2%	(\$3,821,758)	\$722,718	285.43%	3.87%	289.30%	\$62,834	\$2,000,000	\$48,230	\$2,111,064	\$580,287	\$1,530,777	\$558,024	\$0	\$8,108,075		
2016	8,108,075	10,113,456	80.2%	(2,005,381)	741,499	25.62%	4.49%	30.11%	59,853	130,109	46,220	236,182	611,704	(375,522)	637,177	0	8,369,730		
2017	8,369,730	10,369,212	80.7%	(1,999,482)	762,083	21.92%	5.09%	27.01%	56,922	110,127	43,769	210,818	643,025	(432,207)	654,966	0	8,592,489		
2018	8,592,489	10,622,056	80.9%	(2,029,567)	783,861	21.67%	5.67%	27.34%	53,974	115,889	41,821	211,684	672,405	(460,721)	671,805	0	8,803,573		
2019	8,803,573	10,849,614	81.1%	(2,046,041)	806,904	21.36%	6.23%	27.59%	51,046	121,309	39,915	212,270	701,913	(489,643)	687,680	0	9,001,610		
2020	9,001,610	11,059,827	81.4%	(2,058,217)	831,116	21.09%	6.77%	27.86%	48,140	127,142	37,964	213,246	731,135	(517,889)	702,555	0	9,186,276		
2021	9,186,276	11,251,584	81.6%	(2,065,308)	856,217	20.82%	7.28%	28.10%	45,227	133,037	36,124	214,388	761,009	(546,621)	716,342	0	9,355,997		
2022	9,355,997	11,422,928	81.9%	(2,066,931)	882,379	20.60%	7.76%	28.36%	42,327	139,443	34,236	216,006	791,318	(575,312)	728,954	0	9,509,639		
2023	9,509,639	11,571,698	82.2%	(2,062,059)	909,961	20.39%	8.22%	28.61%	39,488	146,053	32,401	217,942	820,046	(602,104)	740,368	0	9,647,903		
2024	9,647,903	11,697,834	82.5%	(2,049,931)	938,825	20.20%	8.66%	28.86%	36,650	152,993	22,813	212,456	849,368	(636,912)	750,248	0	9,761,239		
2025	9,761,239	11,799,585	82.7%	(2,038,346)	969,050	20.09%	9.06%	29.15%	33,875	160,807	20,738	215,420	873,003	(657,583)	758,744	0	9,862,400		
2026	9,862,400	11,872,903	83.1%	(2,010,503)	1,001,120	19.92%	9.45%	29.37%	31,176	168,247	18,721	218,144	901,557	(683,413)	766,031	0	9,945,018		
2027	9,945,018	11,918,008	83.4%	(1,972,990)	1,034,446	19.77%	9.80%	29.57%	28,509	176,001	16,655	221,165	929,373	(708,208)	771,891	0	10,008,701		
2028	10,008,701	11,933,091	83.9%	(1,924,390)	1,069,626	19.63%	10.13%	29.76%	26,034	183,934	14,761	224,729	957,667	(732,938)	776,245	0	10,052,008		
2029	10,052,008	11,916,313	84.4%	(1,864,305)	1,106,678	19.50%	10.42%	29.92%	23,731	192,071	12,948	228,750	985,392	(756,642)	779,019	0	10,074,385		
2030	10,074,385	11,865,652	84.9%	(1,791,267)	1,145,646	19.39%	10.67%	30.06%	21,624	200,517	11,227	233,368	1,011,412	(778,044)	780,227	0	10,076,568		
2031	10,076,568	11,780,397	85.5%	(1,703,829)	1,186,709	19.28%	10.90%	30.18%	19,726	209,071	9,731	238,528	1,034,679	(796,151)	779,962	0	10,060,379		
2032	10,060,379	11,662,111	86.3%	(1,601,732)	1,229,424	19.19%	11.09%	30.28%	18,018	217,908	8,360	244,286	1,054,486	(810,200)	778,410	0	10,028,589		
2033	10,028,589	11,511,413	87.1%	(1,482,824)	1,274,477	19.11%	11.26%	30.37%	16,507	227,045	7,137	250,689	1,073,023	(822,334)	775,701	0	9,981,956		
2034	9,981,956	11,327,022	88.1%	(1,345,066)	1,321,817	19.05%	11.41%	30.46%	15,199	236,607	5,948	257,754	1,085,755	(828,001)	772,096	0	9,926,051		
2035	9,926,051	11,112,560	89.3%	(1,186,509)	1,371,415	18.99%	11.53%	30.52%	14,105	246,327	5,074	265,506	1,093,338	(827,832)	768,001	0	9,866,220		
2036	9,866,220	10,871,180	90.8%	(1,004,960)	1,423,323	18.94%	11.63%	30.57%	13,196	256,381	4,128	273,705	1,097,912	(824,207)	763,751	0	9,805,764		
2037	9,805,764	10,604,140	92.5%	(798,376)	1,477,167	18.91%	11.72%	30.63%	12,465	266,867	3,397	282,729	1,098,768	(816,039)	759,660	0	9,749,385		
2038	9,749,385	10,313,467	94.5%	(564,082)	1,533,230	18.89%	11.78%	30.67%	11,891	277,736	2,760	292,387	1,095,220	(802,833)	756,123	0	9,702,675		
2039	9,702,675	10,002,061	97.0%	(299,386)	1,591,502	19.02%	11.84%	30.86%	11,460	291,323	2,228	305,011	1,089,610	(784,599)	753,674	0	9,671,750		
2040	9,671,750	9,670,609	100.0%	1,141	1,651,862	0.07%	11.88%	11.95%	1,156	0	1,817	2,973	1,079,935	(1,076,962)	727,886	0	9,322,674		
2041	9,322,674	9,321,884	100.0%	790	1,714,628	0.05%	11.92%	11.97%	857	0	1,543	2,400	1,064,562	(1,062,162)	700,591	0	8,961,103		
2042	8,961,103	8,960,572	100.0%	531	1,779,267	0.03%	11.95%	11.98%	534	0	1,245	1,779	1,045,726	(1,043,947)	672,443	0	8,589,599		
2043	8,589,599	8,589,384	100.0%	215	1,846,181	0.03%	11.97%	12.00%	554	0	923	1,477	1,020,949	(1,019,472)	643,766	0	8,213,893		
2044	8,213,893	8,213,820	100.0%	73	1,915,669	0.02%	11.99%	12.01%	383	0	766	1,149	992,249	(991,100)	614,918	0	7,837,711		
2045	7,837,711	7,837,710	100.0%	1	1,987,595	0.01%	12.00%	12.01%	199	0	596	795	961,003	(960,208)	586,140	0	7,463,643		
Totals:									\$797,660	\$6,486,944	\$534,196	\$7,818,800							

Section 4.7 Sensitivity Analysis

Impact Various Investment Rates of Return Have on the Employer/State Contribution Amount



Section 5 Member Data

Section 5.1 Summary of Members Included

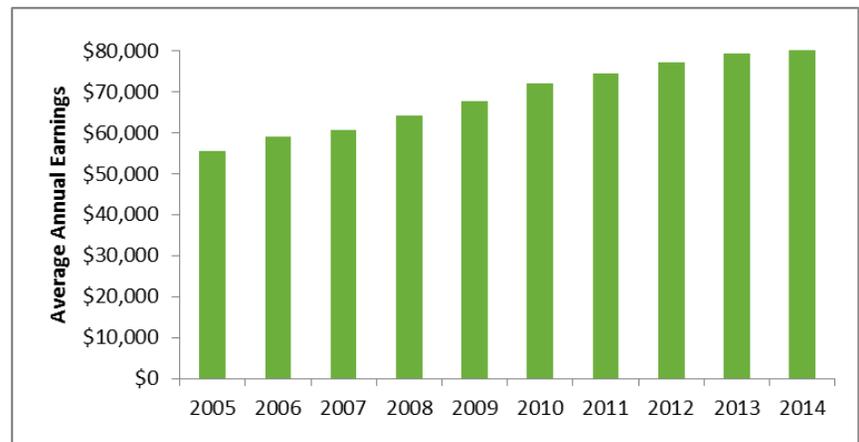
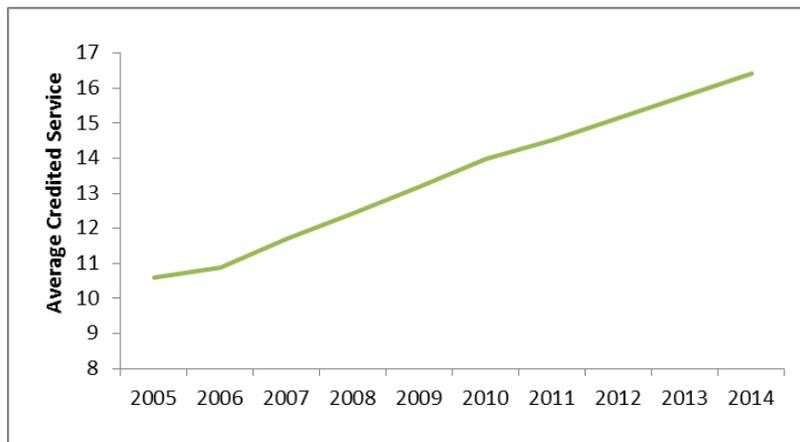
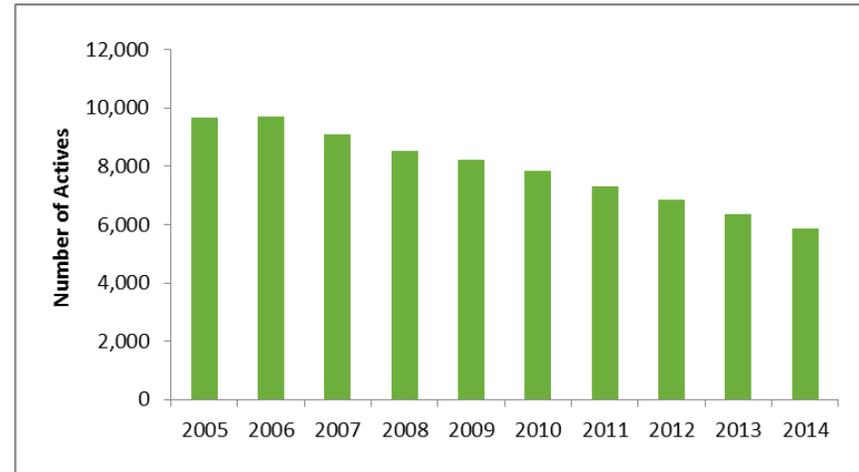
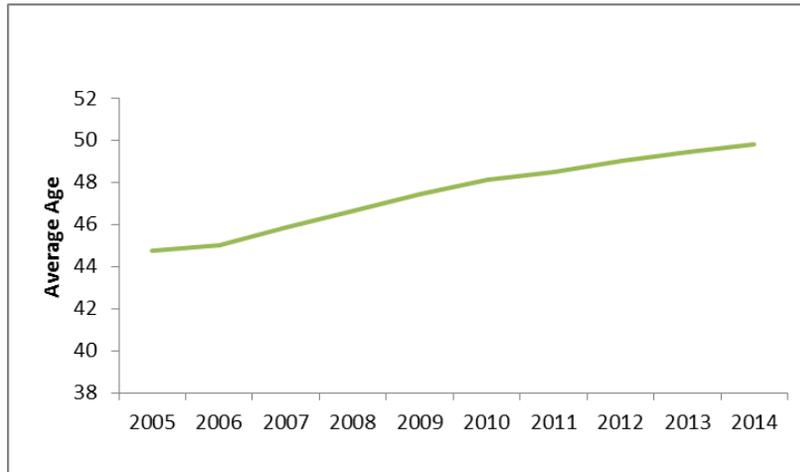
As of June 30	2010	2011	2012	2013	2014
Active Members					
1. Number	7,832	7,303	6,845	6,352	5,861
2. Average Age	48.10	48.50	49.03	49.45	49.79
3. Average Credited Service	13.97	14.52	15.16	15.80	16.43
4. Average Entry Age	34.13	33.98	33.87	33.65	33.36
5. Average Annual Earnings	\$ 72,125	\$ 74,648	\$ 77,351	\$ 79,386	\$ 81,023
6. Number Vested	5,959	5,911	5,918	5,880	5,586
7. Percent Who Are Vested	76.1%	80.9%	86.5%	92.6%	95.3%
Retirees, Disabilitants and Beneficiaries					
1. Number	10,598	11,016	11,301	11,705	11,750
2. Average Age	66.91	67.40	67.88	68.38	69.09
3. Average Monthly Pension Benefit					
Base	\$ 2,017	\$ 2,051	\$ 2,085	\$ 2,111	\$ 2,110
C.O.L.A.	124	125	127	127	126
P.R.P.A.	505	504	527	528	567
Adjustment	0	0	0	0	0
Sick	48	49	52	54	57
Total	\$ 2,694	\$ 2,729	\$ 2,791	\$ 2,820	\$ 2,860
Vested Terminations (vested at time of termination, not refunded contributions or commenced benefit)					
1. Number	840	852	868	906	1,274
2. Average Age	49.34	49.75	49.70	49.68	52.56
3. Average Monthly Pension Benefit	\$ 1,109	\$ 1,184	\$ 1,188	\$ 1,283	\$ 1,916
Non-Vested Terminations (not vested at termination, not refunded contributions)					
1. Number	2,789	2,675	2,559	2,448	2,328
2. Average Account Balance	\$ 15,460	\$ 16,274	\$ 17,266	\$ 17,866	\$ 18,452
Total Number of Members	22,059	21,846	21,573	21,411	21,213

Summary of Members Included

As of June 30, 2014	DB			DCR Tier 3	Grand Total
	Tier 1	Tier 2	Total		
Active Members					
1. Numbers	860	5,001	5,861	3,547	9,408
2. Average Age	58.10	48.36	49.79	38.52	45.54
3. Average Credited Service	25.69	14.84	16.43	3.90	11.71
4. Average Entry Age	32.41	33.52	33.36	34.62	33.84
5. Annual Earnings					
a. Amount (000's)	\$ 78,449,618	\$396,423,603	\$474,873,222	\$219,701,015	\$694,574,237
b. Average	\$ 91,220	\$ 79,269	\$ 81,023	\$ 61,940	\$ 73,828

As of June 30, 2014	Tier 1	Tier 2	Total
Retirees, Disabilitants and Beneficiaries			
1. Number	10,426	1,324	11,750
2. Average Age	69.63	64.81	69.09
3. Average Monthly Pension Benefit			
Base	\$ 2,178	\$ 1,577	\$ 2,110
C.O.L.A.	137	33	126
P.R.P.A.	628	87	567
Adjustment	0	(0)	0
Sick	58	48	57
Total	\$ 3,001	\$ 1,745	\$ 2,860

Active Members at June 30



Section 5.2 Age and Service Distribution of Active Members

Annual Earnings by Age

Age	Number	Total Annual Earnings	Average Annual Earnings
0 – 19	1	\$ 0	\$ 0
20 – 24	0	0	0
25 – 29	0	0	0
30 – 34	206	14,041,324	68,162
35 – 39	663	48,702,442	73,458
40 – 44	1,047	81,495,937	77,838
45 – 49	1,107	89,948,037	81,254
50 – 54	1,086	90,190,041	83,048
55 – 59	944	79,493,400	84,209
60 – 64	563	48,385,614	85,942
65 – 69	205	18,873,621	92,066
70 – 74	32	2,999,448	93,733
75+	8	743,358	92,920
Total	5,861	\$ 474,873,222	\$ 81,023

Annual Earnings by Credited Service

Years of Service	Number	Total Annual Earnings	Average Annual Earnings
0	0	\$ 0	\$ 0
1	3	150,364	50,121
2	6	378,252	63,042
3	10	675,403	67,540
4	18	1,231,824	68,435
0 – 4	37	2,435,843	65,834
5 – 9	769	54,023,344	70,251
10 – 14	1,840	140,187,015	76,189
15 – 19	1,602	131,739,969	82,235
20 – 24	974	85,580,178	87,865
25 – 29	417	38,713,030	92,837
30 – 34	166	16,291,565	98,142
35 – 39	39	4,060,202	104,108
40+	17	1,842,076	108,357
Total	5,861	\$ 474,873,222	\$ 81,023

Years of Credited Service by Age

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
0 – 19	0	0	0	0	0	0	0	0	0	0
20 – 24	0	0	0	0	0	0	0	0	0	0
25 – 29	0	0	0	0	0	0	0	0	0	0
30 – 34	5	126	75	0	0	0	0	0	0	206
35 – 39	10	178	405	70	0	0	0	0	0	663
40 – 44	9	139	438	429	32	0	0	0	0	1,047
45 – 49	4	101	306	382	285	29	0	0	0	1,107
50 – 54	5	79	253	298	303	132	16	0	0	1,086
55 – 59	3	64	198	269	209	124	71	6	0	944
60 – 64	0	56	133	113	107	83	51	17	3	563
65 – 69	1	24	27	35	31	41	23	13	10	205
70 – 74	0	2	4	2	5	8	4	3	4	32
75+	0	0	1	4	2	0	1	0	0	8
Total	37	769	1,840	1,602	974	417	166	39	17	5,861

Total annual earnings are the annualized earnings for the fiscal year ending on the valuation date.

Section 5.3 Member Data Reconciliation

	Active Members	Inactive Members					Total
		Due a Refund	With Deferred Benefits	Retired Members	Disabled Members	Bene-ficiaries	
As of June 30, 2013	6,352	2,448	906	10,688	32	985	21,411
Vested Terminations	(255)	(3)	258	0	0	0	0
Non-vested Terminations	(33)	33	0	0	0	0	0
Cash-outs	(9)	(76)	(3)	0	0	0	(88)
Disability Retirements	(4)	(1)	0	0	4	0	(1)
Age Retirements	(327)	(14)	(84)	429	(4)	N/A	0
Deaths With Beneficiary	(2)	0	0	(58)	(1)	61	0
Deaths Without Beneficiary	(2)	(4)	(1)	(98)	(1)	(19)	(125)
Data Corrections	1	0	0	3	0	(3) ¹	1
Transfers Out	0	0	0	0	0	0	0
Rehires	140	(55)	(81)	(4)	0	0	0
Pick Ups	0	0	0	0	0	15	15
Net Change	(491)	(120)	89	272	(2)	54	(198)
As of June 30, 2014	5,861	2,328	995	10,960	30	1,039	21,213

¹ Expiration of certain period benefit.

Section 5.4 Schedule of Active Member Data

Valuation Date	Number	Annual Earnings (000's) ¹	Annual Average Earnings	Percent Increase/ (Decrease) in Average Earnings	Number of Participating Employers
June 30, 2014	5,861	\$ 474,873	\$ 81,023	2.1%	58
June 30, 2013	6,352	504,260	79,386	2.6%	58
June 30, 2012	6,845	529,468	77,351	3.6%	58
June 30, 2011	7,303	545,155	74,648	3.5%	58
June 30, 2010	7,832	564,887	72,125	6.5%	58
June 30, 2009	8,226	557,026	67,715	5.2%	58
June 30, 2008	8,531	549,148	64,371	5.8%	58
June 30, 2007	9,107	554,245	60,859	2.9%	58
June 30, 2006	9,710	574,409	59,156	6.6%	58
June 30, 2005	9,656	535,837	55,493	2.9%	58

¹ Prior to June 30, 2006, unannualized earnings were used. Starting June 30, 2006, annualized earnings are used.

Section 5.5 Summary of New Pension Benefit Recipients

During the Year Ending June 30	2010	2011	2012	2013	2014
Service					
1. Number	442	496	426	461	146
2. Average Age at Commencement	58.24	59.28	59.41	59.88	60.43
3. Average Monthly Pension Benefit	\$ 2,881	\$ 3,015	\$ 3,100	\$ 3,084	\$ 2,433
Survivor (including surviving spouse and QDROs)					
1. Number	84	62	39	108	76
2. Average Age at Commencement	66.32	68.37	66.09	68.46	70.21
3. Average Monthly Pension Benefit	\$ 1,451	\$ 1,842	\$ 1,945	\$ 1,561	\$ 1,658
Disability Retirements					
1. Number	7	6	8	7	4
2. Average Age at Commencement	53.45	45.50	52.95	49.61	50.80
3. Average Monthly Pension Benefit	\$ 2,857	\$ 3,184	\$ 3,615	\$ 3,625	\$ 3,945
Total					
1. Number	533	564	473	576	226
2. Average Age at Commencement	59.45	60.13	59.85	61.36	63.55
3. Average Monthly Pension Benefit	\$ 2,655	\$ 2,888	\$ 3,013	\$ 2,805	\$ 2,199

Summary of New Pension Benefit Recipients

Average Pension Benefit Payments

	Years of Credited Service						
	0 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30+
Period 7/1/13 – 6/30/14 ¹							
Average Monthly Pension Benefit	\$ 235	\$ 904	\$ 1,435	\$ 2,398	\$ 3,016	\$ 4,073	\$ 7,485
Number of Recipients	8	31	31	28	22	18	12
Period 7/1/12- 6/30/13: ¹							
Average Monthly Pension Benefit	\$ 253	\$ 1,030	\$ 1,496	\$ 2,450	\$ 3,281	\$ 4,384	\$ 6,052
Number of Recipients	10	57	67	90	101	79	64
Period 7/1/11- 6/30/12: ¹							
Average Monthly Pension Benefit	\$ 353	\$ 1,064	\$ 1,512	\$ 2,241	\$ 3,276	\$ 4,320	\$ 5,739
Number of Recipients	11	43	62	61	118	81	58
Period 7/1/10- 6/30/11: ¹							
Average Monthly Pension Benefit	\$ 146	\$ 902	\$ 1,432	\$ 2,328	\$ 3,131	\$ 4,283	\$ 5,496
Number of Recipients	5	68	63	77	118	104	67
Period 7/1/09- 6/30/10: ¹							
Average Monthly Pension Benefit	\$ 482	\$ 1,020	\$ 1,343	\$ 2,263	\$ 2,992	\$ 4,120	\$ 6,263
Number of Recipients	14	50	63	85	109	79	49
Period 7/1/08- 6/30/09: ¹							
Average Monthly Pension Benefit	\$ 230	\$ 950	\$ 1,168	\$ 2,239	\$ 2,957	\$ 3,897	\$ 4,860
Number of Recipients	13	35	64	52	67	54	18
Period 7/1/07- 6/30/08: ¹							
Average Monthly Pension Benefit	\$ 209	\$ 945	\$ 1,248	\$ 2,226	\$ 2,966	\$ 3,832	\$ 5,057
Number of Recipients	13	44	62	92	95	87	33
Period 7/1/06- 6/30/07: ¹							
Average Monthly Pension Benefit	\$ 214	\$ 798	\$ 1,249	\$ 2,250	\$ 2,909	\$ 3,709	\$ 5,109
Number of Recipients	9	41	54	69	102	68	28
Period 7/1/05- 6/30/06:							
Average Monthly Pension Benefit	\$ 1,078	\$ 960	\$ 1,110	\$ 1,982	\$ 2,695	\$ 3,388	\$ 4,563
Number of Recipients	9	50	63	90	124	68	26

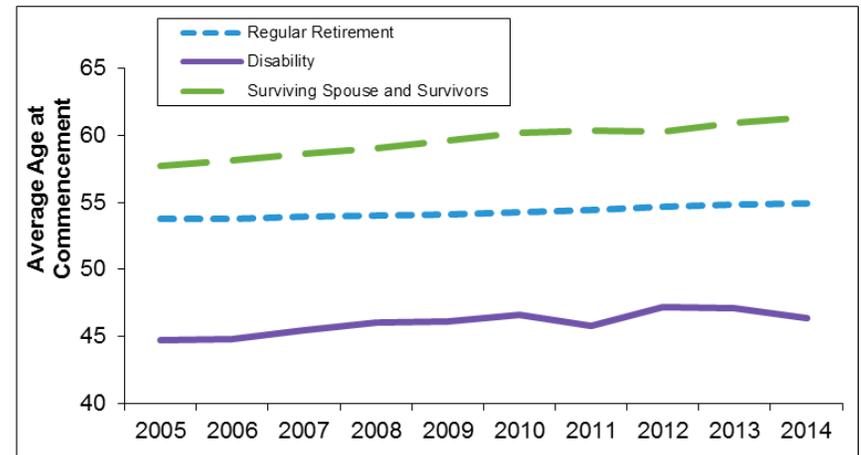
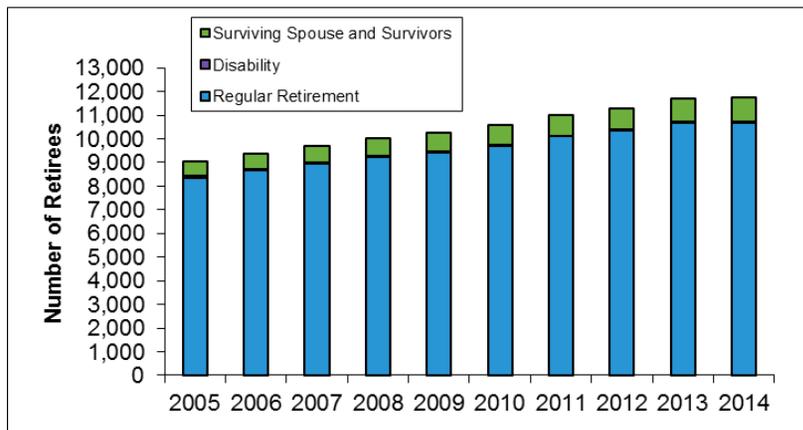
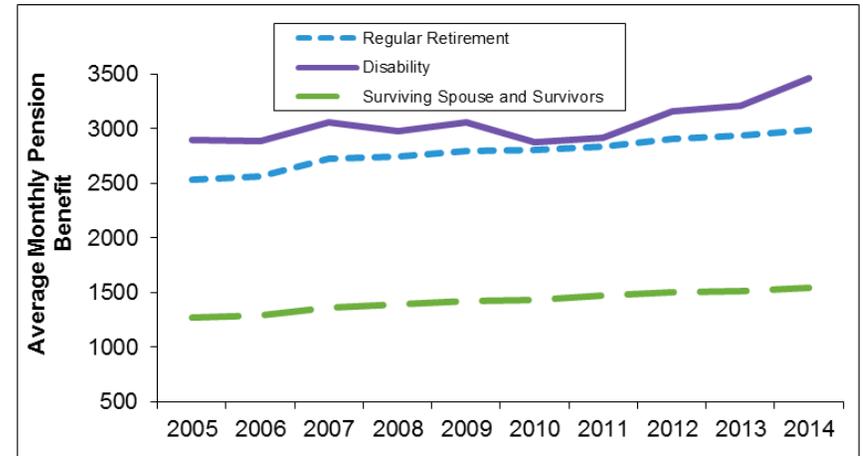
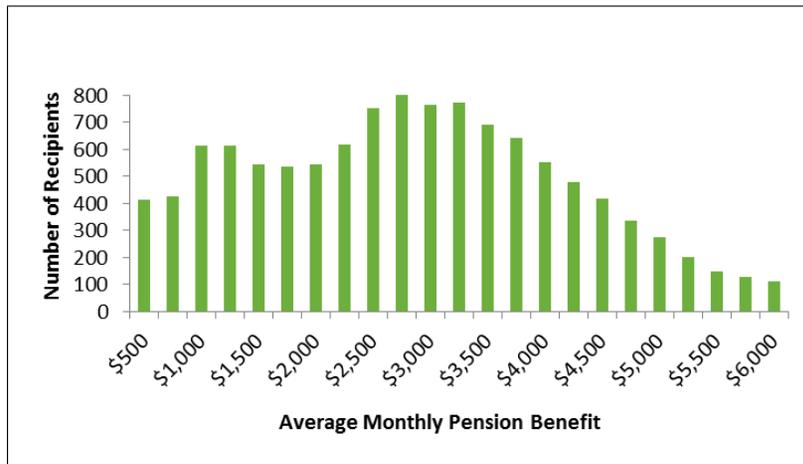
¹“Average Monthly Benefit” includes postretirement pension adjustments and cost-of-living increases

¹ Does not include beneficiaries.

Section 5.6 Summary of All Pension Benefit Recipients

As of June 30	2010	2011	2012	2013	2014
Service					
1. Number, Fiscal Year Start	9,432	9,707	10,094	10,371	10,688
2. Net Change	275	387	277	317	(7)
3. Number, Fiscal Year End	9,707	10,094	10,371	10,688	10,681
4. Average Age at Commencement	54.26	54.48	54.65	54.87	54.91
5. Average Current Age	66.72	67.19	67.67	68.17	68.87
6. Average Monthly Pension Benefit	\$ 2,804	\$ 2,839	\$ 2,901	\$ 2,939	\$ 2,986
Surviving Spouse's Benefits (includes QDROs)					
1. Number, Fiscal Year Start	774	841	882	893	980
2. Net Change	67	41	11	87	54
3. Number, Fiscal Year End	841	882	893	980	1,034
4. Average Age at Commencement	60.23	60.58	60.45	61.07	61.47
5. Average Current Age	70.11	70.64	71.04	71.40	71.98
6. Average Monthly Pension Benefit	\$ 1,431	\$ 1,475	\$ 1,504	\$ 1,517	\$ 1,548
Survivor's Benefits (other than spouses)					
1. Number, Fiscal Year Start	3	6	6	4	5
2. Net Change	3	0	(2)	1	0
3. Number, Fiscal Year End	6	6	4	5	5
4. Average Age at Commencement	31.90	31.90	31.90	38.32	39.19
5. Average Current Age	34.11	35.11	35.71	42.20	44.07
6. Average Monthly Pension Benefit	\$ 648	\$ 656	\$ 711	\$ 1,272	\$ 1,302
Disability Retirements					
1. Number, Fiscal Year Start	46	44	34	33	32
2. Net Change	(2)	(10)	(1)	(1)	(2)
3. Number, Fiscal Year End	44	34	33	32	30
4. Average Age at Commencement	46.64	45.79	47.16	47.13	46.32
5. Average Current Age	52.66	51.06	51.61	50.99	50.40
6. Average Monthly Pension Benefit	\$ 2,879	\$ 2,913	\$ 3,154	\$ 3,213	\$ 3,461
Total					
1. Number, Fiscal Year Start	10,255	10,598	11,016	11,301	11,705
2. Net Change	343	418	285	404	45
3. Number, Fiscal Year End	10,598	11,016	11,301	11,705	11,750
4. Average Age at Commencement	54.69	54.93	55.08	55.36	55.45
5. Average Current Age	66.91	67.40	67.88	68.38	69.09
6. Average Monthly Pension Benefit	\$ 2,694	\$ 2,729	\$ 2,791	\$ 2,820	\$ 2,860

Summary of All Pension Benefit Recipients



Summary of All Pension Benefit Recipients

Distribution of Annual Pension Benefits for Benefit Recipients

Annual Pension Benefit by Age

Age	Number	Total Annual Pension Benefit	Average Annual Pension Benefit
0 – 19	0	\$ 0	\$ 0
20 – 24	2	19,327	9,664
25 – 29	0	0	0
30 – 34	0	0	0
35 – 39	3	133,332	44,444
40 – 44	7	199,315	28,474
45 – 49	61	1,955,306	32,054
50 – 54	297	10,186,961	34,300
55 – 59	1,029	33,519,900	32,575
60 – 64	2,513	79,573,929	31,665
65 – 69	2,954	97,843,827	33,122
70 – 74	2,317	84,714,763	36,562
75+	2,567	95,127,486	37,058
Total	11,750	\$ 403,274,146	\$ 34,321

Annual Pension Benefit by Years Since Commencement

Years Since Commencement	Number	Total Annual Pension Benefit	Average Annual Pension Benefit
0	188	\$ 4,463,409	\$ 23,742
1	548	19,496,504	35,578
2	484	17,215,189	35,569
3	565	20,302,779	35,934
4	452	14,534,797	32,157
0 – 4	2,237	76,012,678	33,980
5 – 9	2,142	65,645,297	30,647
10 – 14	2,171	65,613,779	30,223
15 – 19	2,483	89,626,914	36,096
20 – 24	1,254	47,377,207	37,781
25 – 29	909	39,360,444	43,301
30 – 34	369	13,942,931	37,786
35 – 39	164	5,167,327	31,508
40+	21	527,569	25,122
Total	11,750	\$ 403,274,146	\$ 34,321

Years Since Commencement

Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
0 – 19	0	0	0	0	0	0	0	0	0	0
20 – 24	2	0	0	0	0	0	0	0	0	2
25 – 29	0	0	0	0	0	0	0	0	0	0
30 – 34	0	0	0	0	0	0	0	0	0	0
35 – 39	3	0	0	0	0	0	0	0	0	3
40 – 44	4	3	0	0	0	0	0	0	0	7
45 – 49	46	11	3	1	0	0	0	0	0	61
50 – 54	162	104	27	3	1	0	0	0	0	297
55 – 59	502	326	142	57	1	0	0	0	1	1,029
60 – 64	844	770	522	350	25	2	0	0	0	2,513
65 – 69	376	594	934	780	215	47	6	1	1	2,954
70 – 74	173	218	374	860	462	212	15	2	1	2,317
75+	125	116	169	432	550	648	348	161	18	2,567
Total	2,237	2,142	2,171	2,483	1,254	909	369	164	21	11,750

Section 5.7 Schedule of Pension Benefit Recipients by Type of Pension Benefit and Option Elected

Amount of Monthly Pension Benefit	Number of Recipients	Type of Pension Benefit			Option Selected			
		1	2	3	1	2	3	4
\$ 1 – \$ 300	208	151	57	0	123	45	33	7
301 – 600	361	268	93	0	187	76	78	20
601 – 900	628	505	123	0	325	140	130	33
901 – 1,200	735	601	134	0	423	161	125	26
1,201 – 1,500	678	535	143	0	363	157	133	25
1,501 – 1,800	639	521	118	0	344	149	123	23
1,801 – 2,100	667	550	115	2	338	151	153	25
2,101 – 2,400	803	723	80	0	377	192	207	27
2,401 – 2,700	970	901	67	2	467	222	258	23
2,701 – 3,000	937	895	38	4	439	218	252	28
3,001 – 3,300	911	878	29	4	439	191	258	23
3,301 – 3,600	804	786	15	3	394	152	244	14
3,601 – 3,900	725	703	13	9	377	128	196	24
3,901 – 4,200	618	613	4	1	311	104	191	12
Over \$4,200	2,066	2,051	10	5	978	308	723	57
Totals	11,750	10,681	1,039	30	5,885	2,394	3,104	367

Type of Pension Benefit

1. Regular retirement
2. Survivor payment
3. Disability

Option Selected

1. Whole Life Annuity
2. 75% Joint and Contingent Annuity
3. 50% Joint and Contingent Annuity
4. 66 2/3% Joint and Survivor Annuity
5. Level Income Option

Section 5.8 Pension Benefit Recipients Added to and Removed from Rolls

Year Ended	Added to Rolls		Removed from Rolls		Rolls – End of Year		Percent Increase in Annual Pension Allowances	Average Annual Pension Allowance
	No. ¹²¹	Annual Pension Allowances ¹	No. ¹	Annual Pension Allowances ¹	No.	Annual Pension Allowances		
June 30, 2014	226	\$5,964,256	181	\$(1,150,187)	11,750	\$403,274,146	1.80%	\$34,321
June 30, 2013	576	19,387,542	172	1,652,575	11,705	396,159,703	4.69%	33,845
June 30, 2012	473	17,104,564	188	(617,561)	11,301	378,424,736	4.91%	33,486
June 30, 2011	564	19,546,369	146	1,464,766	11,016	360,702,611	5.28%	32,744
June 30, 2010	533	16,980,817	190	5,495,399	10,598	342,621,008	3.47%	32,329
June 30, 2009	368	9,788,639	139	(2,857,118)	10,255	331,135,590	3.97%	32,290
June 30, 2008	481	14,265,236	133	806,945	10,026	318,489,833	4.41%	31,766
June 30, 2007	432	12,388,703	140	(14,114,559)	9,678	305,031,542	9.52%	31,518
June 30, 2006	487	12,731,292	121	(50,838)	9,386	278,528,280	4.81%	29,675
June 30, 2005	446	11,243,448	133	13,053,612	9,020	265,746,150	(0.68)%	29,462

¹ Numbers are estimated, and include other internal transfers.

Section 6 Basis of the Actuarial Valuation

Section 6.1 Summary of Plan Provisions and Changes in Plan Provisions

1. Effective Date

July 1, 1955, with amendments through June 30, 2014. Chapter 97, 1990 Session Laws of Alaska, created a two-tier retirement system. Members who were first hired under the TRS before July 1, 1990 (Tier 1) are eligible for different benefits than members hired after June 30, 1990 (Tier 2). Chapter 9, 2005 Session Laws of Alaska, closed the plan to new members hired after June 30, 2006.

2. Administration of Plan

The Commissioner of Administration or the Commissioner's designee is the administrator of the system. The Attorney General of the state is the legal counsel for the system and shall advise the administrator and represent the system in legal proceedings.

Prior to June 30, 2005, the Teachers' Retirement Board prescribed policies and adopted regulations and performed other activities necessary to carry out the provisions of the system. The Alaska State Pension Investment Board, Department of Revenue, Treasury Division was responsible for investing TRS funds.

On July 27, 2005, Senate Bill 141, enacted as Chapter 9, 2005 Session laws of Alaska, replaced the Teachers' Retirement Board and the Alaska State Pension Investment Board with the Alaska Retirement Management Board.

3. Employers Included

Currently, there are 58 employers participating in the TRS, including the State of Alaska, 53 school districts, and four other eligible organizations.

4. Membership

Membership in the Alaska TRS is mandatory for the following employees hired before July 1, 2006:

- certificated full-time and part-time elementary and secondary teachers, certificated school nurses, and certificated employees in positions requiring teaching certificates;
- positions requiring a teaching certificate as a condition of employment in the Department of Education and Early Development and the Department of Labor and Workforce Development;
- University of Alaska full-time and part-time teachers, and full-time administrative employees in positions requiring academic standing if approved by the TRS administrator;
- certain full-time or part-time teachers of Alaska Native language or culture who have elected to be covered under the TRS;

- members on approved sabbatical leave under AS 14.20.310;
- certain State legislators who have elected to be covered under the TRS; and
- a teacher who has filed for worker's compensation benefits due to an on-the-job assault and who, as a result of the physical injury, is placed on leave without pay.

Employees participating in the University of Alaska's Optional Retirement Plan or other retirement plans funded by the State are not covered by the TRS.

Employees who work half-time in the TRS and Public Employees' Retirement System (PERS) simultaneously are eligible for half-time TRS and PERS credit.

Senate Bill 141, signed into law on July 27, 2005, closes the plan effective July 1, 2006 to new members first hired on or after July 1, 2006.

5. Credited Service

TRS members receive a year of membership credit if they work a minimum of 172 days during the school year (July 1 through June 30 of the following year). Fractional credit is determined based on the number of days worked. Part-time members who work at least 50% of full-time receive membership credit for each day in proportion to full-time service. Credit is granted for all Alaskan public school service.

Members may claim other types of service, including:

- Outside teaching service in out-of-state schools or Alaska private schools (not more than ten years may be claimed);
- Military service (not more than five years of military service or ten years of combined outside and military service may be claimed);
- Alaska Bureau of Indian Affairs (BIA) service;
- Retroactive Alaskan service that was not creditable at the time it occurred, but later became creditable because of legislative change;
- Unused sick leave credit after members retire; and
- Leave of absence without pay.

Except for retroactive Alaska service that occurred before July 1, 1955, and unused sick leave, contributions are required for all claimed service.

Members receiving TRS disability benefits continue to earn TRS credit while disabled.

Survivors who are receiving occupational death benefits continue to earn TRS service credit while occupational survivor benefits are being paid.

6. Employer Contributions

TRS employers contribute the amounts required, in addition to employees' contributions, to fund the benefits of the system.

The normal cost rate is a uniform rate for all participating employers (less the value of members' contributions).

The past service rate is a uniform rate for all participating employers to amortize the unfunded past service liability with payments that are a level dollar amount over fixed 25-year periods.

Employer rates cannot be less than the normal cost rate.

7. Additional State Contribution

Pursuant to AS14.25.070 effective July 1, 2008, the State shall contribute an amount (in addition to the State contribution as an employer) that when combined with the employer contribution (12.56%) will be sufficient to pay the total contribution rate adopted by The State of Alaska Retirement Management Board.

8. Member Contributions

Mandatory Contributions: Members are required to contribute 8.65% of their base salaries. Members' contributions are deducted from gross salaries before federal income taxes are withheld.

Contributions for Claimed Service: Member contributions are also required for most of the claimed service described in (5) above.

1% Supplemental Contributions: Members who joined the system before July 1, 1982 and elected to participate in the supplemental contributions provision are required to contribute an additional 1% of their salaries. Supplemental contributions are deducted from gross salaries after federal income taxes are withheld. Under the supplemental provision, an eligible spouse or dependent child will receive a survivor's allowance or spouse's pension if the member dies (see (13) below). Supplemental contributions are only refundable upon death (see (13) below).

Interest: Members' contributions earn 4.5% interest, compounded annually on June 30.

Refund of Contributions: Terminated members may receive refunds of their member contribution accounts which includes their mandatory contributions, indebtedness payments, and interest earned. Terminated members' accounts may be attached to satisfy claims under Alaska Statute 09.38.065, federal income tax levies, and valid Qualified Domestic Relations Orders.

Reinstatement of Contributions: Refunded accounts and the corresponding TRS service may be reinstated upon reemployment in the TRS prior to July 1, 2010. Interest accrues on refunds until paid in full or members retire.

9. Retirement Benefits

Eligibility:

- a. Members, including deferred vested members, are eligible for normal retirement at age 55 or early retirement at age 50 if they were hired before July 1, 1990 (Tier 1) and age 60 or early retirement at age 55 if they were hired on or after July 1, 1990 (Tier 2). Additionally, they must have at least:
 - (i) eight years of paid-up membership service;
 - (ii) 15 years of paid-up creditable service, the last five years of which are membership service, and they were first hired under the TRS before July 1, 1975;
 - (iii) five years of paid-up membership service and three years of paid-up Alaska Bureau of Indian Affairs service;
 - (iv) 12 years of combined part-time and full-time paid-up membership service;
 - (v) two years of paid-up membership service if they are vested in the Public Employees' Retirement System (PERS); or
 - (vi) one year of paid-up membership service if they are retired from the PERS.
- b. Members may retire at any age when they have:
 - (i) 25 years of paid-up creditable service, the last five years of which are membership service;
 - (ii) 20 years of paid-up membership service;
 - (iii) 20 years of combined paid-up membership and Alaska Bureau of Indian Affairs service, the last five years of which are membership service; or
 - (iv) 20 years of combined paid-up part-time and full-time membership service.

Benefit Type: Lifetime benefits are paid to members. Eligible members may receive normal, unreduced benefits when they (1) reach normal retirement age and complete the service required; or (2) satisfy the minimum service requirements to retire at any age under (b) above. Members may receive early, actuarially reduced benefits when they reach early retirement age and complete the service required.

Members may select joint and survivor options and a last survivor option. Under those options and early retirement, benefits are actuarially adjusted so that members receive the actuarial equivalents of their normal benefit amounts.

Benefit Calculation: Retirement benefits are calculated by multiplying the average base salary (ABS) times the total TRS service times the percentage multiplier. The ABS is determined by averaging the salaries earned during the three highest school years. Members must earn at least 115 days of credit in a school year to include it in the ABS calculation. The TRS pays a minimum benefit of \$25.00 per month for each year of service when the calculated benefit is less.

The percentage multipliers are 2% for the first 20 years and 2.5% for all remaining service. Service before July 1, 1990 is calculated at 2%.

Indebtedness: Members who terminate and refund their TRS contributions are not eligible to retire unless they return to TRS employment and pay back their refunds plus interest or accrue additional service which qualifies them for retirement. TRS refunds must be paid in full if the corresponding service is to count toward the minimum service requirements for retirement. Refunded TRS service is included in total service for the purpose of calculating retirement benefits. However, when refunds are not completely paid before retirement, benefits are actuarially reduced for life. Indebtedness balances may also be created when a member purchases qualified claimed service.

10. Reemployment of Retired Members

Retirees who return to work in a permanent full-time or part-time TRS position after a Normal Retirement are eligible to return under the Standard Option.

Under the Standard Option, retirement and retiree healthcare benefits are suspended while retired members are reemployed under the TRS. During reemployment, members earn additional TRS service and contributions are withheld from their wages.

Members retired under the RIP who return to employment under the TRS, Public Employees' Retirement System (PERS), Judicial Retirement System (JRS) or the University of Alaska's Optional Retirement Plan will:

- c. forfeit the three years of incentive credits that they received;
- d. owe the TRS 110% of the benefits that they received under the RIP, which may include costs for health insurance, excluding amounts that they paid to participate; and
- e. be charged 7% interest from the date that they are reemployed until their indebtedness is paid in full or they retire again. If the indebtedness is not completely paid, future benefits will be actuarially reduced for life.

Employers make contributions to the unfunded liability of the plan on behalf of rehired retired members at the rate the employer is making contributions to the unfunded liability of the plan for other members.

11. Postemployment Healthcare Benefits

When pension benefits begin, major medical benefits are provided by the TRS to (1) all employees first hired before July 1, 1990 (Tier 1) and their surviving spouses and (2) members and their surviving spouses who have twenty-five years of membership service, are disabled or age sixty or older, regardless of their initial hire dates. Employees first hired after June 30, 1990 (Tier 2) and their surviving spouses may receive major medical benefits prior to age sixty by paying premiums.

12. Disability Benefits

Monthly disability benefits are paid to permanently disabled members until they die, recover or become eligible for normal retirement. To be eligible, members must have at least five years of paid-up membership service.

Disability benefits are equal to 50% of the member's base salary at the time of disability. The benefit is increased by 10% of the base salary for each minor child, up to a maximum of 40%. Members continue to earn TRS service until eligible for normal retirement.

Members are appointed to normal retirement on the first of the month after they become eligible.

13. Death Benefits

Monthly death benefits may be paid to a spouse or dependent children upon the death of a member. If monthly benefits are not payable under the supplemental contributions provision or occupational and nonoccupational death provisions, the designated beneficiary receives the lump sum benefit described below.

Occupational Death: When an active member dies from occupational causes, a monthly survivor's pension may be paid to the spouse, unless benefits are payable under the supplemental contributions provision (below). The pension equals 40% of the member's base salary on the date of death or disability, if earlier. If there is no spouse, the pension may be paid to the member's dependent children. On the member's normal retirement date, the benefit converts to a normal retirement benefit. The normal benefit is based on the member's average base salary on the date of death and service, including service accumulated from the date of the member's death to the normal retirement date.

Nonoccupational Death: When a vested member dies from nonoccupational causes, the surviving spouse may elect to receive a monthly 50% joint and survivor benefit or a lump sum benefit, unless benefits are payable under the supplemental contributions provision (below). The monthly benefit is calculated on the member's average base salary and TRS service accrued at the time of death.

Lump Sum Benefit: Upon the death of an active member who has less than one year of service or an inactive member who is not vested, the designated beneficiary receives the member's contribution account, which includes mandatory contributions, indebtedness payments, and interest earned. Any supplemental contributions will also be refunded. If the member has more than one year of TRS service or is vested, the beneficiary also receives \$1,000 and \$100 for each year of TRS service, up to a maximum of \$3,000. An additional \$500 may be payable if the member is survived by dependent children.

Supplemental Contributions Provision: Members are eligible for supplemental coverage if they joined the TRS before July 1, 1982, elected to participate in the supplemental provision, and made the required contributions. A survivor's allowance or spouse's pension (below) may be payable if the member made supplemental contributions for at least one year and dies while in membership service or while disabled under the TRS. In addition, the allowance and pension may be payable if the member dies while retired or in deferred vested status if supplemental contributions were made for at least five years.

- a. **Survivor's Allowance:** If the member is survived by dependent children, the surviving spouse and dependent children are entitled to a survivor's allowance. The allowance for the spouse is equal to 35% of the member's base salary at the time of death or disability, plus 10% for each dependent child up to a maximum of 40%. The allowance terminates and a spouse's pension becomes payable when there is no longer an eligible dependent child.
- b. **Spouse's Pension:** The spouse's pension is equal to 50% of the retirement benefit that the deceased member was receiving or the unreduced retirement benefit that the deceased member would have received if retired at the time of death. The spouse's pension begins on the first of the month after the member's death or termination of the survivor's allowance.
- c. **Death After Retirement:** If a joint and survivor option was selected at retirement, the eligible spouse receives continuing, lifetime monthly benefits after the member dies. A survivor's allowance or spouse's pension may be payable if the member participated in the supplemental contributions provision. If a joint and survivor option was not selected and benefits are not payable under the supplemental contributions provision, the designated beneficiary receives the member's contribution account, less any benefits already paid and the member's last benefit check.

14. Postretirement Pension Adjustments

Postretirement pension adjustments (PRPAs) are granted annually to eligible benefit recipients when the consumer price index (CPI) for urban wage earners and clerical workers for Anchorage increases during the preceding calendar year. PRPAs are calculated by multiplying the recipient's base benefit, including past PRPAs, excluding the Alaska COLA, times:

- a. 75% of the CPI increase in the preceding calendar year or 9%, whichever is less, if the recipient is at least age 65 or on TRS disability; or
- b. 50% of the CPI increase in the preceding calendar year or 6%, whichever is less, if the recipient is at least age 60, or under age 60 if the recipient has been receiving benefits for at least eight years.

Ad hoc PRPAs, up to a maximum of 4%, may be granted to eligible recipients who were first hired before July 1, 1990 (Tier 1) if the CPI increases and the funding ratio is at least 105%.

In a year where an Ad Hoc PRPA is granted, eligible recipients will receive the higher of the two calculations.

15. Alaska Cost of Living Allowance

Eligible benefit recipients who reside in Alaska receive an Alaska cost of living allowance (COLA) equal to 10% of their base benefits. The following benefit recipients are eligible:

- a. members who were first hired under the TRS before July 1, 1990 (Tier 1) and their survivors;
- b. members who were first hired under the TRS after June 30, 1990 (Tier 2) and their survivors if they are at least age 65; and
- c. all disabled members.

Changes in Benefit Provisions Since the Prior Valuation

There have been no changes in benefit provisions since the prior valuation.

Section 6.2 Description of Actuarial Methods and Valuation Procedures

The funding method used in this valuation was adopted by the Board in October 2006. The asset smoothing method used to determine valuation assets was changed effective June 30, 2002.

Benefits valued are those delineated in Alaska State statutes as of the valuation date. Changes in State statutes effective after the valuation date are not taken into consideration in setting the assumptions and methods.

a. **Actuarial Method** – Entry Age Actuarial Cost.

Liabilities and contributions shown in the report are computed using the Entry Age Actuarial Cost method of funding. Any funding surpluses or unfunded accrued liability is amortized over 25 years as a level percentage of payroll amount. State statutes allow the contribution rate to be determined on payroll for all members, defined benefit and defined contribution member payroll combined.

Projected pension and postemployment healthcare benefits were determined for all active members. Cost factors designed to produce annual costs as a constant percentage of each member's expected compensation in each year for pension benefits (constant dollar amount for healthcare benefits) from the assumed entry age to the assumed retirement age were applied to the projected benefits to determine the normal cost (the portion of the total cost of the plan allocated to the current year under the method). The normal cost is determined by summing intermediate results for active members and determining an average normal cost rate which is then related to the total payroll of active members. The actuarial accrued liability for active members (the portion of the total cost of the plan allocated to prior years under the method) was determined as the excess of the actuarial present value of projected benefits over the actuarial present value of future normal costs.

The actuarial accrued liability for retired members and their beneficiaries currently receiving benefits, terminated vested members and disabled members not yet receiving benefits was determined as the actuarial present value of the benefits expected to be paid. No future normal costs are payable for these members.

The actuarial accrued liability under this method at any point in time is the theoretical amount of the fund that would have been accumulated had annual contributions equal to the normal cost been made in prior years (it does not represent the liability for benefits accrued to the valuation date). The unfunded actuarial accrued liability is the excess of the actuarial accrued liability over the actuarial value of plan assets measured on the valuation date.

Under this method, experience gains or losses, i.e., decreases or increases in accrued liabilities attributable to deviations in experience from the actuarial assumptions, adjust the unfunded actuarial accrued liability.

b. **Valuation of Assets**

The actuarial asset value was reinitialized to equal Fair Value of Assets as of June 30, 2014. Beginning in 2015, the asset value method will recognize 20% of the gain or loss each year, for a period of up to 5 years. All assets are valued at fair value. Assets are accounted for on an accrued basis and are taken directly from financial statements audited by KPMG LLP.

c. Changes in Methods Since the Prior Valuation

In accordance with Senate Bill 119, signed into law May 28, 2014, and HB 385, signed into law on June 23, 2014, the following changes are effective for this June 30, 2014 actuarial valuation:

- The amortization method used for funding changed from the level dollar amount to the level percentage of payroll method and the amortization period is re-initialized to a closed 25-year period from June 30, 2014.
- The additional state contribution for fiscal year ending June 30, 2015 is exactly \$2,000,000,000.
- The two-year rate setting time lag is intended to be eliminated. The two-year lag in the setting of contribution rates is replaced by a two-year roll forward of liabilities and projected normal costs and a one-year roll forward of June 30, 2015 assets.
- The Actuarial Value of Assets is reset to the Fair Value as of June 30, 2014. The five-year smoothing method with grow-in will be implemented over the next five years.
- The 20% corridor over/under the Fair Value of Assets is eliminated in the calculation of the Actuarial Value of Assets.

d. Valuation of Medical Benefits

This section outlines the detailed methodology used to develop the initial per capita claims cost rates for the State of Alaska Teachers' Retirement System postemployment healthcare plan. Note that methodology reflects the results of our annual experience rate update for the period July 1, 2014 to June 30, 2015.

Base claims cost rates are incurred healthcare costs expressed as a rate per member per year. Ideally, claims cost rates should be derived for each significant component of cost that can be expected to require differing projection assumptions or methods, i.e., medical claims, prescription drug claims, administrative costs, etc. Separate analysis is limited by the availability and credibility of cost and enrollment data for each component of cost. This valuation reflects non-prescription claims separated by Medicare status, including eligibility for free Part A coverage. Prescription costs are analyzed separately as in prior valuations. Administrative costs are assumed in the final per capita claims cost rates used for valuation purposes, as described below. Analysis to date on Medicare Part A coverage is limited since Part A claim data is not available by individual, nor is this status incorporated into historical claim data.

We analyzed HealthSmart management level reporting for fiscal 2011 through 2014 and derived recommended base claims cost rates as described in the following steps:

1. Based on analysis described in our Experience Study, dental, vision and audio claims (DVA) are excluded from data analyzed for this valuation.
2. Available historic management level reporting from HealthSmart does not show claims or enrollment separately for Medicare and non-Medicare plan participants, but does include overall statistics as to the percentage of claims and enrollment attributable to both groups. Historical claim level reporting and estimated impacts of Medicare coordination and plan design were used to augment cost data by Medicare status. Aetna does provide separate

experience by Medicare status and will be incorporated into per capita rate development as credible experience emerges.

- Alaska retirees who do not have 40 quarters of Medicare-covered compensation do not qualify for Medicare Part A coverage free of charge. This is a relatively small and closed group. Medicare was applied to State employment for all employees hired after March 31, 1986. For these “no-Part A” individuals, the State is the primary payer for hospital bills and other Part A services. Thus, claims costs are higher for the no-Part A group. To date, claim experience is not available separately for participants with both Medicare Parts A and B and those with Part B only. Therefore, higher no-Part A claims are spread across the entire retired population and have been applied to future claims of current active employees projected to retire in the future. To the extent that no-Part A claims can be isolated and applied strictly to the appropriate closed group, actuarial accrued liability will be more accurate and will be lower. The smaller the no-Part A population, the more accrued liabilities will decrease.

Based on census data received from Aetna, 0.33% of the current retiree (including dependents) population was identified as having coverage only under Medicare Part B. For future retirees, we assume their Part A eligible status based on a combination of date of hire and/or re-hire, date of birth, tier, etc

All claims cost rates developed from management level reporting have been compared to similar rates developed from claim level data.

- The steps above result in separate incurred claims cost rates for medical and prescription benefits for non-Medicare, Medicare Part B only and Medicare Part A&B members for the past four fiscal years. Medical claims cost rates reflect differing average ages and levels of Medicare coordination for each group. Prescription claims cost rates reflect differing average ages. We deemed incurred claim data from HealthSmart management reports to be complete for fiscal 2011, 2012 and 2013. Fiscal 2014 medical claim data was completed using a factor of 0.81; fiscal 2014 prescription claim data was completed using a factor of 0.92 – these factors were derived from historic completion patterns for AlaskaCare retiree claims. Incurred claim cost rates are projected forward to the valuation year using a blend of Alaska plan-specific trend and national trend rates over the same period, with Alaska experience receiving 75% weight, national trend 25%. These weighted trend factors for this purpose for the current valuation are as follows:

Alaska-Specific and National Average Weighted Trend from Experience Period to Valuation Year			
Experience Period	Medical	Prescription	Weighting Factors
FY2010 to FY2011	8.1%	4.5%	10%
FY2011 to FY2012	8.3%	5.1%	20%
FY2012 to FY2013	8.9%	7.1%	40%
FY2013 to FY2014	7.7%	6.5%	30%

- For per capital claim cost development, medical claims were trended on a composite basis for pre-Medicare vs. Medicare due to limited reporting as noted in #2 above. Trend assumptions used for rate development are assessed annually and as additional/improved reporting becomes available, we will incorporate into rate development as appropriate.
- Healthcare Reform legislation passed on March 23, 2010 included several provisions with potential implications for the State of Alaska Retiree Health Plan liability. Buck evaluated the impact of the following provisions; however, none of the impacts other than noted fees have been included in the valuation results.

Because the State plan is retiree-only, and was in effect at the time the legislation was enacted, not all provisions are required. Unlimited lifetime benefits and dependent coverage to age 26 are two of these provisions. We reviewed the impact of including these provisions, but there was no decision made to adopt them, and no requirement to do so.

The Plan will be subject to the high cost plan excise tax (Cadillac tax). Based upon guidance available at the time of disclosure, Buck estimated the impact to be immaterial to the accrued liability based on a blend of pre-Medicare and Medicare retirees and the projected impact to future healthcare cost trends due to the estimated tax.

Patient-centered outcomes research fees are included in the admin fees.

We have not identified any other specific provisions of healthcare reform that would be expected to have a significant impact on the measured obligation. As additional guidance on the legislation is issued, we will continue to monitor any potential impacts.

Description of Actuarial Methods and Valuation Procedure

June 30, 2014 Valuation – FY 2015 Claims Cost Rates

	Medical			Prescription Drugs			Total
	Pre-Medicare	Medicare A&B	Medicare B Only	Pre-Medicare	Medicare A&B	Medicare B Only	
Fiscal 2011 Incurred Claims	\$ 232,724,861	\$ 55,613,464	\$ 849,158	\$ 48,405,895	\$ 85,637,669	\$ 393,968	\$ 423,625,015
Membership	31,362	29,997	138	31,362	29,997	138	61,497
Paid Claims Cost Rate	\$ 7,421	\$ 1,854	\$ 6,153	\$ 1,543	\$ 2,855	\$ 2,855	\$ 6,889
Trend to FY2015	1.372	1.372	1.372	1.253	1.253	1.253	
FY 2015 Paid Cost Rate	\$ 10,182	\$ 2,544	\$ 8,443	\$ 1,934	\$ 3,576	\$ 3,576	\$ 9,191
Paid to Incurred Factor	0.970	0.993	0.993	0.967	0.967	0.967	
FY 2015 Incurred Cost Rate	\$ 9,876	\$ 2,526	\$ 8,384	\$ 1,870	\$ 3,458	\$ 3,458	\$ 8,936
Fiscal 2012 Incurred Claims	\$ 233,755,671	\$ 71,481,207	\$ 1,587,051	\$ 50,508,869	\$ 95,412,095	\$ 590,097	\$ 453,334,990
Membership	29,500	33,631	208	29,500	33,631	208	63,339
Paid Claims Cost Rate	\$ 7,924	\$ 2,125	\$ 7,630	\$ 1,712	\$ 2,837	\$ 2,837	\$ 7,157
Trend to FY2015	1.269	1.269	1.269	1.199	1.199	1.199	
FY 2015 Paid Cost Rate	\$ 10,058	\$ 2,698	\$ 9,685	\$ 2,053	\$ 3,401	\$ 3,401	\$ 8,922
Paid to Incurred Factor	0.970	0.970	0.970	0.967	0.967	0.967	
FY 2015 Incurred Cost Rate	\$ 9,757	\$ 2,617	\$ 9,395	\$ 1,985	\$ 3,289	\$ 3,289	\$ 8,646
Fiscal 2013 Incurred Claims	\$ 240,038,962	\$ 73,485,175	\$ 1,901,568	\$ 52,633,265	\$ 99,470,696	\$ 569,334	\$ 468,099,000
Membership	27,037	37,913	217	27,037	37,913	217	65,167
Paid Claims Cost Rate	\$ 8,878	\$ 1,938	\$ 8,763	\$ 1,947	\$ 2,624	\$ 2,624	\$ 7,183
Trend to FY2015	1.172	1.172	1.172	1.140	1.140	1.140	
FY 2015 Paid Cost Rate	\$ 10,407	\$ 2,272	\$ 10,272	\$ 2,220	\$ 2,992	\$ 2,992	\$ 8,345
Paid to Incurred Factor	0.970	0.970	0.970	0.967	0.967	0.967	
FY 2015 Incurred Cost Rate	\$ 10,094	\$ 2,204	\$ 9,963	\$ 2,147	\$ 2,893	\$ 2,893	\$ 8,087
Fiscal 2014 Incurred Claims	\$ 264,308,816	\$ 81,160,409	\$ 2,901,430	\$ 45,236,118	\$ 131,470,349	\$ 692,910	\$ 525,770,032
Membership	24,486	42,311	223	24,486	42,311	223	67,020
Paid Claims Cost Rate	\$ 10,794	\$ 1,918	\$ 13,011	\$ 1,847	\$ 3,107	\$ 3,107	\$ 7,845
Trend to FY2015	1.076	1.076	1.076	1.065	1.065	1.065	
FY 2015 Paid Cost Rate	\$ 11,613	\$ 2,064	\$ 13,998	\$ 1,967	\$ 3,308	\$ 3,308	\$ 8,411
Paid to Incurred Factor	0.985	0.985	0.985	0.984	0.984	0.984	
FY 2015 Incurred Cost Rate	\$ 11,439	\$ 2,033	\$ 13,788	\$ 1,935	\$ 3,254	\$ 3,254	\$ 8,280
Weighted Average 7/1/2014-6/30/2015 Incurred Claims Cost Rates:							
At average age	\$ 10,408	\$ 2,267	\$ 10,839	\$ 2,023	\$ 3,137	\$ 3,137	\$ 8,342
At age 65	\$ 12,362	\$ 1,657	\$ 7,920	\$ 2,624	\$ 2,624	\$ 2,624	\$ 8,132

Description of Actuarial Methods and Valuation Procedures

Following the development of total projected costs, a distribution of per capita claims cost was developed. This was accomplished by allocating total projected costs to the population census used in the valuation. The allocation was done separately for each of prescription drugs and medical costs for the Medicare eligible and pre-Medicare populations. The allocation weights were developed using participant counts by age and assumed morbidity and aging factors. Results were tested for reasonableness based on historical trend and external benchmarks for costs paid by Medicare.

Below are the results of this analysis:

Distribution of Per Capita Claims Cost by Age for the Period July 1, 2014 through June 30, 2015

Age	Medical and Medicare Parts A & B	Medical and Medicare Part B Only	Prescription Drug	Medicare Retiree Drug Subsidy
45	\$ 6,846	\$ 6,846	\$ 1,384	\$ 0
50	7,746	7,746	1,644	0
55	8,764	8,764	1,953	0
60	10,408	10,408	2,263	0
65	1,657	7,920	2,624	507
70	2,016	9,636	2,827	546
75	2,394	11,442	3,015	583
80	2,579	12,326	3,091	597

Section 6.3 Summary of Actuarial Assumptions and Changes in Assumptions

The demographic and economic assumptions used in the June 30, 2014 valuation are described below. These assumptions were adopted by the Board in December 2014. These assumptions were the result of an experience study performed as of June 30, 2013.

Investment Return / Discount Rate	8.00% per year (geometric), compounded annually, net of expenses.
Salary Scale	Inflation – 3.12% per year. Productivity – 0.50% per year. See Table 1 for salary scale rates.
Payroll Growth	3.62% per year. (Inflation + Productivity).
Total Inflation	Total inflation as measured by the Consumer Price Index for urban and clerical workers for Anchorage is assumed to increase 3.12% annually.
Mortality (Pre-termination)*	Based upon the 2010-2013 actual experience. (See Table 2). 68% of male rates and 60% of female rates of post-termination mortality. Deaths are assumed to result from non-occupational causes 85% of the time.
Mortality (Post-termination)*	Based upon the 2010-2013 actual experience. (See Table 3). 94% of male and 97% of female rates of RP-2000, 2000 Base Year projected to 2018 with Projection Scale BB, with a 3-year setback for males and a 4-year setback for females.
Turnover	Select and ultimate rates based upon the 2010-2013 actual withdrawal experience. (See Table 4).
Disability	Incidence rates based upon the 2010-2013 actual experience, in accordance with Table 5. Post-disability mortality in accordance with the RP-2000 Disabled Retiree Mortality Table, 2000 Base Year, projected to 2018 with Projection Scale BB.
Retirement	Retirement rates based upon the 2010 - 2013 actual experience in accordance with Table 6. Deferred vested members are assumed to retire at their earliest unreduced retirement date.
Marriage and Age Difference	Wives are assumed to be three years younger than husbands. 85% of male members and 75% of female members are assumed to be married.
Dependent Children	Benefits to dependent children have been valued assuming members who are married and between the ages of 25 and 45 have two dependent children.
Contribution Refunds	5% of terminating members with vested benefits are assumed to have their contributions refunded. 100% of those with non-vested benefits are assumed to have their contributions refunded.

*The mortality assumptions include an allowance for future mortality improvement. The mortality table used was set in 2014 with an Actual Deaths to Expected Deaths ratio of 110%.

COLA	Of those benefit recipients who are eligible for the COLA, 60% are assumed to remain in Alaska and receive the COLA.															
Sick Leave	4.5 days of unused sick leave for each year of service are assumed to be available to be credited once the member is retired, terminates or dies.															
Postretirement Pension Adjustment	50% and 75% of assumed inflation, or 1.56% and 2.34% respectively, is valued for the annual automatic Postretirement Pension Adjustment (PRPA) as specified in the statute.															
Expenses	All expenses are net of the investment return assumption.															
Part-time Status	Part-time employees are assumed to earn 0.75 years of credited service per year.															
Re-employment Option	We assume all re-employed retirees return to work under the Standard Option.															
Service	Total credited service is provided by the State. We assume that this service is the only service that should be used to calculate benefits. Additionally, the State provides claimed service (including Bureau of Indian Affairs Service). Claimed service is used for vesting and eligibility purposes as described in Section 2.1.															
Final Average Earnings	Final Average Earnings is provided on the data for active members. This amount is used as a minimum in the calculation of the average earnings in the future.															
Per Capita Claims Cost	Sample claims cost rates adjusted to age 65 for FY15 medical benefits are shown below: <table border="1"> <thead> <tr> <th></th> <th>Medical</th> <th>Prescription Drugs</th> </tr> </thead> <tbody> <tr> <td>Pre-Medicare</td> <td>\$ 12,362</td> <td>\$ 2,624</td> </tr> <tr> <td>Medicare Parts A & B</td> <td>\$ 1,657</td> <td>\$ 2,624</td> </tr> <tr> <td>Medicare Part B Only</td> <td>\$ 7,920</td> <td>\$ 2,624</td> </tr> <tr> <td>Medicare Part D</td> <td>N/A</td> <td>\$ 507</td> </tr> </tbody> </table>		Medical	Prescription Drugs	Pre-Medicare	\$ 12,362	\$ 2,624	Medicare Parts A & B	\$ 1,657	\$ 2,624	Medicare Part B Only	\$ 7,920	\$ 2,624	Medicare Part D	N/A	\$ 507
	Medical	Prescription Drugs														
Pre-Medicare	\$ 12,362	\$ 2,624														
Medicare Parts A & B	\$ 1,657	\$ 2,624														
Medicare Part B Only	\$ 7,920	\$ 2,624														
Medicare Part D	N/A	\$ 507														
Third Party Administrator Fees	\$193.98 per person per year; assumed trend rate of 5% per year.															
Medicare Part B Only	For actives and retirees not yet Medicare-eligible, participation is set based on whether the employee/retiree will have 40 quarters of employment after March 31, 1986, depending upon date of hire and/or re-hire.															

Health Cost Trend

The table below shows the rate used to project the cost from the shown fiscal year to the next fiscal year. For example, 10.0% is applied to the FY15 pre-Medicare medical claims cost to get the FY16 medical claims cost.

	Medical Pre-65	Medical Post-65	Prescription Drugs
FY15	10.0%	6.0%	6.0%
FY16	9.4%	5.9%	5.7%
FY17	8.8%	5.8%	5.4%
FY18	8.2%	5.7%	5.1%
FY19	7.6%	5.6%	4.8%
FY20	7.0%	5.6%	4.6%
FY21	6.5%	5.6%	4.4%
FY25	5.6%	5.6%	4.2%
FY50	4.4%	4.0%	4.0%
FY100	4.4%	4.0%	4.0%

For the June 30, 2012 valuations and later, the updated Society of Actuaries' Healthcare Cost Trend Model is used to project medical and prescription drug costs. This model effectively begins estimating trend amounts beginning in 2012 and projects out to 2100. The model has been populated with assumptions that are specific to the State of Alaska.

Aging Factors

Age	Medical	Prescription Drugs
0-44	2.0%	4.5%
45-54	2.5%	3.5%
55-64	3.5%	3.0%
65-73	4.0%	1.5%
74-83	1.5%	0.5%
84-93	0.5%	0.0%
94+	0.0%	0.0%

Retired Member Contributions for Medical Benefits

Currently contributions are required for TRS members who are under age 60 and have less than 25 years of service. Eligible Tier 1 members are exempt from contribution requirements. Annual FY15 contributions based on monthly rates shown below for calendar 2014 and 2015 are assumed based on the coverage category for current retirees. The composite rate shown is used for current active and inactive members in Tier 2 who are assumed to retire prior to age 60 with less than 25 years of service and who are not disabled:

Coverage Category	Calendar 2015 Annual Contribution	Calendar 2015 Monthly Contribution	Calendar 2014 Monthly Contribution
Retiree Only	\$ 9,876	\$ 823	\$ 823
Retiree and Spouse	\$ 19,764	\$ 1,647	\$ 1,647
Retiree and Child(ren)	\$ 13,956	\$ 1,163	\$ 1,163
Retiree and Family	\$ 23,844	\$ 1,987	\$ 1,987
Composite	\$ 14,676	\$ 1,223	\$ 1,223

Trend Rate for Retired Member Medical Contribution

The table below shows the rate used to project the retired member medical contributions from the shown fiscal year to the next fiscal year. For example, 7.0% is applied to the FY15 retired member medical contributions to get the FY16 retired member medical contributions.

FY15	7.0%
FY16	6.6%
FY17	6.2%
FY18	5.8%
FY19	5.4%
FY20	5.0%
FY25	4.1%
FY50	4.0%
FY100	4.0%

Graded trend rates for retired member medical contributions were reinitialized for the June 30, 2014 valuation. Note that actual FY15 retired member medical contributions are reflected in the valuation so trend on such contribution during FY15 is not applicable.

Healthcare Participation

100% of system paid members and their spouses are assumed to elect healthcare benefits as soon as they are eligible. 10% of non-system paid members and their spouses are assumed to elect healthcare benefits as soon as they are eligible.

Table 1
Alaska TRS
Salary Scale

Years of service	Percent Increase
0	8.11%
1	7.51%
2	6.91%
3	6.41%
4	6.11%
5	6.11%
6	5.90%
7	5.69%
8	5.55%
9	5.40%
10	5.26%
11	5.11%
12	4.96%
13	4.84%
14	4.72%
15	4.60%
16	4.49%
17	4.37%
18	4.27%
19	4.17%
20	4.07%
21	3.97%
22+	3.87%

Table 2
Alaska TRS
Mortality Table (Pre-termination)

Age	Male	Female	Age	Male	Female
20	0.000182	0.000098	53	0.001295	0.000855
21	0.000191	0.000101	54	0.001483	0.000908
22	0.000200	0.000104	55	0.001615	0.000985
23	0.000209	0.000105	56	0.001766	0.001054
24	0.000216	0.000105	57	0.001901	0.001132
25	0.000222	0.000106	58	0.002117	0.001221
26	0.000226	0.000107	59	0.002409	0.001344
27	0.000228	0.000109	60	0.002643	0.001501
28	0.000228	0.000111	61	0.002917	0.001659
29	0.000229	0.000114	62	0.003229	0.001837
30	0.000231	0.000118	63	0.003599	0.002080
31	0.000238	0.000123	64	0.004021	0.002367
32	0.000249	0.000130	65	0.004504	0.002723
33	0.000269	0.000137	66	0.005057	0.003118
34	0.000302	0.000146	67	0.005594	0.003582
35	0.000340	0.000169	68	0.006202	0.004036
36	0.000382	0.000193	69	0.007017	0.004546
37	0.000425	0.000217	70	0.007828	0.005130
38	0.000468	0.000240	71	0.008702	0.005696
39	0.000509	0.000262	72	0.009643	0.006297
40	0.000547	0.000283	73	0.010813	0.006959
41	0.000584	0.000305	74	0.011964	0.007841
42	0.000618	0.000330	75	0.013285	0.008701
43	0.000653	0.000357	76	0.014797	0.009678
44	0.000692	0.000389	77	0.016508	0.010757
45	0.000736	0.000427	78	0.018423	0.011923
46	0.000787	0.000470	79	0.020534	0.013163
47	0.000846	0.000517	80	0.022841	0.014502
48	0.000913	0.000567	81	0.025382	0.015972
49	0.000979	0.000620	82	0.028208	0.017607
50	0.001050	0.000674	83	0.031344	0.019438
51	0.001126	0.000731	84	0.035081	0.021486
52	0.001208	0.000791	85	0.039193	0.023782

Table 3
Alaska TRS
Mortality Table (Post-termination)

Age	Male	Female	Age	Male	Female
50	0.001544	0.001124	85	0.057637	0.039636
51	0.001656	0.001219	86	0.064248	0.043940
52	0.001777	0.001318	87	0.072770	0.048789
53	0.001904	0.001424	88	0.082264	0.054261
54	0.002181	0.001513	89	0.092884	0.060450
55	0.002375	0.001641	90	0.104794	0.068659
56	0.002597	0.001756	91	0.118129	0.077983
57	0.002795	0.001887	92	0.132941	0.088452
58	0.003113	0.002035	93	0.149196	0.100021
59	0.003543	0.002240	94	0.165479	0.112560
60	0.003887	0.002501	95	0.182705	0.125866
61	0.004289	0.002765	96	0.200693	0.139699
62	0.004749	0.003062	97	0.219249	0.153813
63	0.005293	0.003466	98	0.233940	0.164973
64	0.005913	0.003946	99	0.252821	0.178741
65	0.006624	0.004538	100	0.267022	0.188730
66	0.007436	0.005196	101	0.285888	0.201393
67	0.008227	0.005970	102	0.299408	0.209540
68	0.009121	0.006727	103	0.318102	0.220440
69	0.010318	0.007576	104	0.331094	0.226232
70	0.011511	0.008550	105	0.349384	0.237489
71	0.012798	0.009494	106	0.360058	0.246863
72	0.014180	0.010494	107	0.368483	0.258063
73	0.015902	0.011599	108	0.374013	0.270683
74	0.017595	0.013068	109	0.376000	0.284323
75	0.019536	0.014502	110	0.376000	0.298577
76	0.021760	0.016130	111	0.376000	0.313043
77	0.024276	0.017929	112	0.376000	0.327318
78	0.027093	0.019871	113	0.376000	0.340998
79	0.030198	0.021938	114	0.376000	0.353678
80	0.033590	0.024170	115	0.376000	0.364959
81	0.037326	0.026620	116	0.376000	0.374435
82	0.041482	0.029345	117	0.376000	0.381702
83	0.046095	0.032397	118	0.376000	0.386359
84	0.051589	0.035811	119	0.376000	0.388000

Table 4
Alaska TRS
Turnover Assumptions
Select Rates of Turnover During the First 8 Years of Employment

Service	Female	Male
0	0.170	0.204
1	0.170	0.204
2	0.140	0.168
3	0.120	0.144
4	0.100	0.120
5	0.090	0.108
6	0.075	0.090
7	0.060	0.072

Ultimate Rates of Turnover After the First 8 Years of Employment

Age	Female	Male	Age	Female	Male
15	0.037185	0.031209	40	0.036224	0.030159
16	0.037157	0.031170	41	0.036155	0.030085
17	0.037138	0.031138	42	0.036086	0.030010
18	0.037129	0.031107	43	0.035976	0.029866
19	0.037120	0.031091	44	0.035867	0.029721
20	0.036848	0.030847	45	0.035757	0.029577
21	0.036848	0.030831	46	0.035648	0.029432
22	0.036839	0.030799	47	0.035538	0.029288
23	0.036839	0.030776	48	0.035380	0.029046
24	0.036830	0.030736	49	0.035221	0.028805
25	0.036830	0.030705	50	0.035063	0.028563
26	0.036820	0.030673	51	0.034847	0.028248
27	0.036762	0.030642	52	0.034595	0.027878
28	0.041480	0.030610	53	0.034296	0.027468
29	0.046198	0.030579	54	0.059961	0.046305
30	0.050917	0.030555	55	0.059285	0.045414
31	0.055635	0.030540	56	0.058410	0.044334
32	0.060353	0.030516	57	0.057288	0.043012
33	0.055569	0.030500	58	0.056018	0.041567
34	0.050784	0.030455	59	0.054401	0.039826
35	0.046000	0.030431	60	0.052569	0.037868
36	0.041215	0.030407	61	0.050523	0.035694
37	0.036431	0.030383	62	0.048197	0.033170
38	0.036362	0.030308	63	0.045540	0.030294
39	0.036293	0.030234	64	0.042653	0.027176
			65+	0.066000	0.054000

Table 5
Alaska TRS
Disability Table

Age	Unisex
20	0.000560
21	0.000563
22	0.000565
23	0.000574
24	0.000583
25	0.000593
26	0.000602
27	0.000611
28	0.000611
29	0.000612
30	0.000612
31	0.000613
32	0.000613
33	0.000622
34	0.000631
35	0.000641
36	0.000650
37	0.000659
38	0.000674
39	0.000689
40	0.000703
41	0.000718
42	0.000733
43	0.000770
44	0.000806
45	0.000843
46	0.000879
47	0.000916
48	0.000975
49	0.001034
50	0.001093
51	0.001152
52	0.001211
53	0.001356
54	0.001501

Table 6
Alaska TRS
Retirement Table

Age	Reduced	Unreduced	
	Unisex	Male	Female
< 45	N/A	0.03	0.03
46	N/A	0.05	0.05
47	N/A	0.05	0.08
48	N/A	0.05	0.08
49	N/A	0.05	0.08
50	0.08	0.05	0.13
51	0.08	0.08	0.12
52	0.08	0.15	0.12
53	0.08	0.15	0.13
54	0.16	0.15	0.14
55	0.08	0.20	0.16
56	0.08	0.17	0.16
57	0.08	0.15	0.16
58	0.08	0.20	0.16
59	0.16	0.20	0.22
60	N/A	0.25	0.22
61	N/A	0.18	0.22
62	N/A	0.18	0.20
63	N/A	0.18	0.20
64	N/A	0.18	0.25
65	N/A	0.30	0.20
66	N/A	0.25	0.20
67	N/A	0.25	0.20
68	N/A	0.25	0.25
69	N/A	0.35	0.25
70	N/A	0.30	0.25
71	N/A	0.30	0.35
72	N/A	0.30	0.35
73	N/A	0.30	0.35
74	N/A	0.30	0.35
75 – 84	N/A	0.50	
85+	N/A	1.00	

Table 7
Alaska TRS
Disabled Mortality Rates

Age	Female	Male	Age	Female	Male
≤45	0.0071	0.0214	80	0.0582	0.0833
46	0.0078	0.0226	81	0.0621	0.0880
47	0.0085	0.0238	82	0.0662	0.0928
48	0.0093	0.0250	83	0.0707	0.0978
49	0.0101	0.0262	84	0.0755	0.1028
50	0.0109	0.0275	85	0.0806	0.1079
51	0.0118	0.0287	86	0.0862	0.1130
52	0.0127	0.0299	87	0.0921	0.1204
53	0.0137	0.0311	88	0.0985	0.1282
54	0.0144	0.0324	89	0.1054	0.1362
55	0.0151	0.0336	90	0.1148	0.1503
56	0.0158	0.0348	91	0.1249	0.1667
57	0.0164	0.0354	92	0.1359	0.1841
58	0.0171	0.0359	93	0.1475	0.2022
59	0.0176	0.0365	94	0.1611	0.2209
60	0.0182	0.0370	95	0.1745	0.2400
61	0.0188	0.0376	96	0.1877	0.2594
62	0.0194	0.0382	97	0.2003	0.2790
63	0.0204	0.0389	98	0.2084	0.2934
64	0.0214	0.0396	99	0.2192	0.3128
65	0.0226	0.0404	100	0.2250	0.3264
66	0.0238	0.0413	101	0.2362	0.3459
67	0.0252	0.0422	102	0.2455	0.3585
68	0.0267	0.0434	103	0.2613	0.3762
69	0.0284	0.0454	104	0.2741	0.3850
70	0.0303	0.0477	105	0.2931	0.3979
71	0.0323	0.0502	106	0.3078	0.4000
72	0.0345	0.0529	107	0.3227	0.4000
73	0.0368	0.0558	108	0.3374	0.4000
74	0.0393	0.0591	109	0.3515	0.4000
75	0.0420	0.0625	110	0.3646	0.4000
76	0.0449	0.0662	111	0.3762	0.4000
77	0.0479	0.0702	112	0.3860	0.4000
78	0.0511	0.0744	113	0.3935	0.4000
79	0.0546	0.0788	114	0.3983	0.4000
			115+	0.4000	0.4000

Changes in Actuarial Assumptions Since the Prior Valuation

	June 30, 2013	June 30, 2014
Salary Scale	Based on actual experience from 2005 to 2009.	Rates adjusted on actual experience from 2010 – 2013.
Pre-termination Mortality	The 1994 GAM Sex-distinct Table, 1994 Base Year projected to 2013 using Projection Scale AA, adjusted 45% for males, and 55% for females.	68% of male rates and 60% of female rates of the post-termination mortality rates. Deaths are assumed to result from non-occupational causes 85% of the time.
Post-termination Mortality	The 1994 GAM Sex-distinct Table, 1994 Base Year projected to 2013 using Projection Scale AA, setback 3 years for females and 4-year setback for males.	94% of male and 97% female rates of RP-2000, 2000 Base Year projected to 2018 with Projection Scale BB, with a 3-year setback for males and a 4-year setback for females.
Disability Mortality	RP-2000 Disabled Retiree Mortality Table.	RP-2000 Disabled Retiree Mortality, 2000 Base Year projected to 2018, with Scale BB
Turnover	Based on actual experience from 2005 to 2009.	Select and ultimate rates based upon the 2010-2013 actual withdrawal experience.
Disability	Based on actual experience from 2005 to 2009 and stop rates at earliest retirement age.	Incidence rates based upon the 2010-2013 actual experience. Male/Female rates increased and changed to Unisex rates.
Retirement	Rates adjusted based on actual experience from 2005 to 2009.	Retirement rates based upon the 2010 - 2013 actual experience.
Part-time Service	.60 years of credited service per year.	Part-time employees are assumed to earn 0.75 years of credited service per year.

June 30, 2013

June 30, 2014

Health Cost Trend

	Medical Pre-65	Medical Post-65	Prescription Drugs
FY14	8.7%	6.4%	6.3%
FY15	8.5%	6.3%	6.2%
FY16	8.0%	6.3%	6.2%
FY17	7.5%	6.2%	6.1%
FY18	7.0%	6.1%	6.0%
FY19	6.6%	6.1%	5.8%
FY20	6.4%	6.1%	5.8%
FY25	6.0%	6.0%	5.7%
FY50	5.0%	5.0%	5.0%
FY100	4.5%	4.5%	4.5%

	Medical Pre-65	Medical Post-65	Prescription Drugs
FY15	10.0%	6.0%	6.0%
FY16	9.4%	5.9%	5.7%
FY17	8.8%	5.8%	5.4%
FY18	8.2%	5.7%	5.1%
FY19	7.6%	5.6%	4.8%
FY20	7.0%	5.6%	4.6%
FY21	6.5%	5.6%	4.4%
FY25	5.6%	5.6%	4.2%
FY50	4.4%	4.0%	4.0%
FY100	4.4%	4.0%	4.0%

Trend Rate for Retired Member Medical Contribution

FY13 Trend Assumption	
FY14	8.2%
FY15	8.0%
FY16	7.6%
FY17	7.2%
FY18	6.7%
FY19	6.4%
FY25	5.9%
FY50	5.0%
FY100	4.5%

FY14 Trend Assumption	
FY15	7.0%
FY16	6.6%
FY17	6.2%
FY18	5.8%
FY19	5.4%
FY20	5.0%
FY25	4.1%
FY50	4.0%
FY100	4.0%

Glossary of Terms

Actuarial Accrued Liability	Total accumulated cost to fund pension benefits arising from service in all prior years.
Actuarial Cost Method	Technique used to assign or allocate, in a systematic and consistent manner, the expected cost of a pension plan for a group of plan members to the years of service that give rise to that cost.
Actuarial Present Value of Projected Benefits	Amount which, together with future interest, is expected to be sufficient to pay all future benefits.
Actuarial Valuation	Study of probable amounts of future pension benefits and the necessary amount of contributions to fund those benefits.
Actuary	Person who performs mathematical calculations pertaining to pension and insurance benefits based on specific procedures and assumptions.
Annual Required Contribution	Disclosure measure of annual pension cost.
GASB 25 and 27	Governmental Accounting Standards Board Statement Number 25 which specifies how the Annual Required Contribution (ARC) is to be calculated, and Number 27 which specifies Employer reporting of Pension Cost.
GASB 43 and 45	Governmental Accounting Standards Board Statement Number 43 which specifies how the Annual Required Contribution (ARC) is to be calculated, and Number 45 which specifies Employer reporting of OPEB Cost.
GASB 67 and 68	Governmental Accounting Standards Board Statement Number 67 amends Number 25 effective for the fiscal year beginning after June 15, 2013, and defines new financial reporting requirements for public pension plans. Governmental Accounting Standards Board Statement Number 68 amends Number 27 effective for fiscal years beginning after June 15, 2014 and defines new accounting and financial reporting requirements for employers sponsoring public pension plans.
Liquidity Factor	Is calculated as the average annual Fair Value of Assets divided by the total annual benefit payments. This measures the approximate number of years that assets will cover benefit payments without contributions or investment return. Trend shows solvency risk.
Maturity Ratio	The ratio of the actuarial accrued liability for members who are no longer active to the total actuarial accrued liability. A ratio of over 50% indicates a mature plan. The higher the maturity ratio, the more volatile the contribution rate will be from year to year given actuarial gains and losses.
Normal Cost	That portion of the actuarial present value of benefits assigned to a particular year in respect to an individual participant or the plan as a whole.
Unfunded Actuarial Accrued Liability (UAAL)	The portion of the actuarial accrued liability not offset by plan assets.
Vested Benefits	Benefits which are unconditionally guaranteed regardless of employment status.